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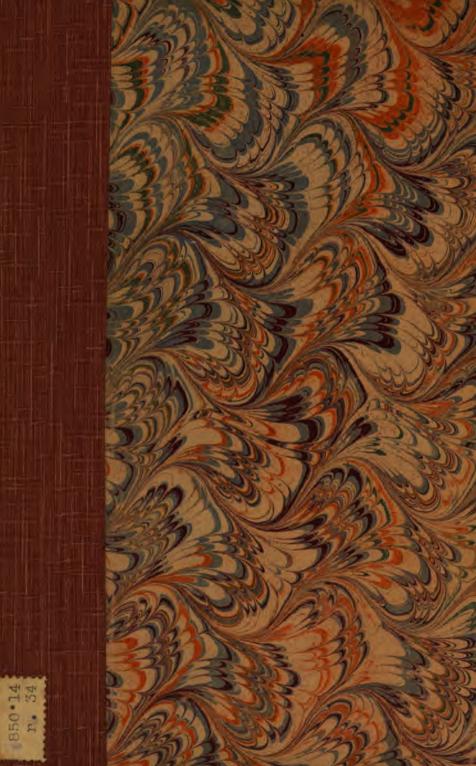
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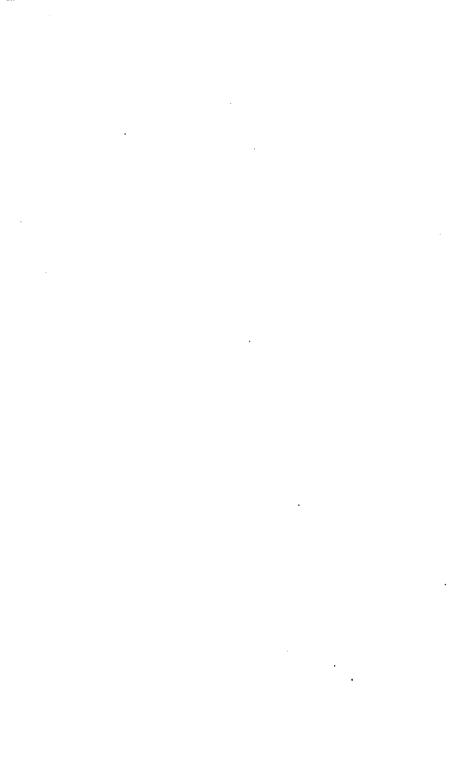


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# COLONIAL SURVEYING

WITH A VIEW TO THE

## DISPOSAL OF WASTE LAND:

IN A REPORT TO THE NEW-ZEALAND-COMPANY.

BY

### FELIX WAKEFIELD.

LONDON:

JOHN W. PARKER, WEST STRAND.

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## CONTENTS.

Objects of the Report					page 1
	•	•	•	•	_
Main principle of the recommendations	•	•	•	•	. 2
Modification of the principle		1	•	•	4
Necessity of a real Survey for giving information .	•				6
The mode of Survey dependent on the mode of sale					8
Extinction of Native Title					9
Expediency of extending Survey to all the land in	. &	S	ettl	θ-	
ment					11
Reasons for a temporary make-shift process					13
Pastoral husbandry in New Zealand					ib.
Division of the subject	•	4	٠.		16
<b>I.</b>					
MODE OF SALE.					
1. THE SALE OF FREEHOLD LAND.					•
Objects of the Company in disposing of waste land					17
Advantages of a fixed price			٠.		19
Objections to sale by auction					ib.
Reasons for a uniform price					21
Inexpediency of marking out town and suburban lots					25
Freedom of selection promoted by uniform price .					26

2.	THE	SALE	OF	RIGHT	OF	PASTURAGE.
----	-----	------	----	-------	----	------------

Disposal of temporary rights of pasturage	29
Pasturage occupation to be distinct from freehold purchase	30
Pastoral occupier to have pre-emptive right of freehold purchase	32
MODE OF SALE CONTINUED.	
Minimum of freehold and pastoral blocks	. 34
Price or rent of pasturage	36
Payment in advance	37
Priority of selection	ib.
Form and frontage of sections	40
Main lines of road	44
River frontage	45
MODE OF SURVEYING, DESCRIBING, AND MAPPING	•
Comparison of waste and settled countries	46
Objects of the survey defined	47
Nature of the survey	48
Details of survey	51
EXECUTION OF THE SURVEY.	
Establishment of the Land Department	53
Exploring	ib.
Trigonometrical survey	54
Traverse surveying by contract	55

INFORMATION	ON	THE	DETAILS	OF	FIELD-WORK.
INTURMATION	$\mathbf{o}_{\mathbf{n}}$	TUL	DEIVIRG	UF	LIEDD-MOVV.

Marine survey					•									56
Geological information														63
Meteorology														ib.
Completion of the map	•	•	•	•	•	•	•	•	•	•	•		•	65
			т	TT.										
			1	11.										
MODE OF SELE	CT!	ON	Γ, (	GIV	IN	G	POS	SSE	SS	ON	Ι,	AN	D	
COM	PL	ET:	ING	r	H	T	T	LE.						
Selection by purchasers										•				67
Giving possession										•				<b>6</b> 8
<b>a</b>														40
Cost of survey, selec														69
Adaptation of the propo	sed	sy	ster	n t	o p	res	ent	arı	ang	gem	en	ts	•	78
TEMPORARY MAKE-SHIF	r P	RO	CES	3.										80
Numerous degrees of inf	feri	or (	con	ple	eten	ess	of	sur	vey	٠.		•		83
Scale of operations		:												85
Conclusion								_						87

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## T. C. HARINGTON, ESQ.,

#### SECRETARY OF THE NEW ZEALAND COMPANY.

Nayland, 10th September, 1849.

SIR,

REFERRING to the letter which you did me the honour to address to me on the 8th May last, to my answer of the 9th May, and to your reply of the 8th June, I have now the satisfaction of submitting to the Court of Directors of the New-Zealand Company a Report on the subject of that correspondence.

As this Report is intended to form a sort of code for the regulation of public surveying, and the disposal of public lands in the South Province of New Zealand, and to be so framed as to place upon paper, for the direction of the Company's servants, now and hereafter, the views, generally and in ample detail, which I should have endeavoured to carry into effect myself. if I had been able to accept the proposal which the Directors did me the honour to make to me of being appointed their Surveyor General; as the extent of waste land to which such Regulations would be applicable when the native title thereto shall be extinguished, amounts to nearly fifty million acres; and as, with a view to the most rapid and prosperous colonization of this vast territory, there is nothing to be compared in importance with the adoption of the

best mode of converting into private property the waste lands at the disposal of the Company, it seems expedient and even necessary, that I should commence my Report by distinctly setting forth the principles which I have taken as a guide in framing regulations with respect both to surveying and to the disposal of land by the Company to individuals. the Company should do me the honour to adopt my suggestions, it will desire to obtain for them the public confidence: and this it can only do by subjecting to public examination the grounds on which those suggestions are based. The whole plan, if it should be the best for the South Province of New Zealand, would also be the best for the North Province, and the Australian colonies, whether the disposal of the public lands in those colonies were administered by Companies or by the Colonial Office, or by local governments independently of the Colonial The subject of the disposal of waste land excites an interest in that part of the world proportioned to its great importance to the welfare of the The New-Zealand Company therefore may be sure that its mode of proceeding will undergo rigid scrutiny by competent judges. If the verdict of colonial opinion should be in its favour, the colonization of the Company's territory will thereby be greatly promoted. For all these reasons I purpose, in the explanatory portion of my report, to aim at fulness of explanation rather than brevity.

The main and over-ruling principle which I have had constantly in view, and to which every one of the Regulations that I shall presently submit to you has strict reference, is that which is commonly expressed

by the words "free trade." The value of this principle as regards the disposal of waste land in colonies, has not been impressed upon me by recent events and discussions in this country; it was forced on me as a conviction by long residence in the colonies, and by a personal acquaintance, on the most extensive scale, with the impediments to colonization which arise from restrictions on the exercise of private judgment in the selection of waste land, and with the beneficial effects on the progress of emigration and settlement which are occasioned by allowing to such private judgment the fullest and freest exercise. The intending settler, or purchaser of waste land, can alone know what will suit him best. Having money to invest in the acquisition of land, he is essentially a trader for the time; and like every other trader, in whatever line of business, his judgment is so quickened and strengthened by the all-powerful operation of self-interest, that it is impossible for any other man or any set of men, however earnestly bent upon doing him a service, to choose his land for him as well as he can choose it for himself. Whatever in any measure limits his freedom of choice, whether as to quantity or situation, is calculated to injure and deter him. Even if the very best choice were made for him by another, he would be dissatisfied with it because it was not his The Company, as representing the Government, is a great seller of land: its object is to sell as much as possible: and in order to sell as much as possible, it must not only allow intending purchasers to consult their own interest by taking what will best serve their infinitely varied purposes, but it must also give them the satisfaction which all men derive from

being able to realize their own opinion. It is because the opinion is theirs, that they cherish it and love to realize it. This is so with regard to the purchase of any goods, or a horse, or a watch, but it is more especially so with regard to the purchase of an estate: and if, as will be at once admitted, the purchaser in this country of an estate which he intends to live upon, is, more than by anything else, gratified by exercising his own taste and judgment in the selection of it, let me assure you that the settler upon waste land in a colony, whose delight it is to contemplate the conversion of a piece of wilderness into fertile fields and a comfortable home by the toil of his own head and hands, is even more gratified by pleasing his own fancy in the selection of the district and the spot which are to be his home for life. The force of this sentiment can alone be duly estimated by those who have witnessed it in new colonies, and have seen the disappointment and misery which settlers incur when their selection of a home is impeded or restricted by an authority over which they have no control. first object, therefore, as it appears to me, in framing a system of Regulations for the disposal of waste land, is to give every intending purchaser, as far as that shall be possible, the same freedom of choice as to quantity and situation as, where free trade prevails, is generally enjoyed by the purchasers of commodities in the market.

But this principle of free trade, as regards commodities in general, must of necessity be modified in some respects when applied to the disposal of waste land. The land open to purchasers differs from a commodity in the market in some important parti-

culars. It has not, like other commodities, been produced by an outlay of capital and labour. It has no market value determined by the cost of produc-Neither has it a value arising from competition determined by the proportion between the demand and supply. The supply being practically unlimited, and the demand necessarily at all times very small in proportion thereto, competition, as respects quantity, is out of the question: but as respects situation and quality of land, inasmuch as in every district the quantity of the most fertile and best situated land is necessarily limited, there will be a competition for these most eligible spots. If, therefore, there were a perfectly unlimited liberty of choice, as respects both quantity and situation, every purchaser taking that quantity of land and in that situation which he liked best, a very few purchasers would pick out and appropriate not those spots which were best calculated to serve their purposes as settlers, but the spots, the possession of which would give them a monopoly as against all other purchasers of all the very best land in the whole settlement. They would select long stripes of land on the edge of harbours, on the borders of rivers, and on both sides of main roads. By taking all the cream, they would leave nothing but inferior property for others. All others besides these few, instead of having a perfect liberty of choice, would have to put up with what the few had left, and with what, moreover, they had spoiled by appropriating its frontages to road and water. This would indeed be liberty for a few, but the most mischievous restraint and impediment for others. Perfect liberty for a few, but with no liberty for the great mass of purchasers, would not be in accordance with the principle of free trade, but very much at variance with it. In order to give effect to that principle, it is necessary that the few should be prevented from profiting a little at the great expense of the many. The object to secure is as much liberty for all as is compatible with equality and justice for all. I shall have to dwell on this point hereafter when suggesting the particular means whereby to provide for this equality and justice. It has been mentioned here only for the purpose of laying down the second principle which I shall have in view throughout this Report; namely, the necessity of taking care that a blind adoption of the principle of free trade shall not lead practically to inequality and injustice amongst the purchasers.

In another respect, waste land laid open for sale differs materially from other commodities in the market. The seller of other commodities takes pains to enable purchasers to judge of their quality and value. When an intending purchaser appears, every opportunity is afforded him of examining the goods for sale. Without such power of examination, he would be unable to select goods according to his own judgment: if he bought, he would do so, as it were, blindfolded; he would buy 'a pig in a poke.' I use this expression, because it is a common one in the mouths of settlers who have purchased waste land without really knowing what it was they bought. mere declaration upon paper that a certain portion of the wilderness is open to purchasers, affords no means of exercising judgment in selection with respect either to quality or situation. The commodity offered for sale is not exhibited, but is, in reality, shut up from

inspection, and even from observation. That is the case, at least, with respect to the great mass of purchasers, who possess neither the hardy strength nor the knowledge derived from experience, which are indispensable for the purpose of exploring a waste region that has not been surveyed and mapped. A very few possess these qualities, and may be enabled by the exercise of them to choose their land with judgment and with benefit to themselves; but the power of exploring a waste and unknown country is so rare as certainly not to be enjoyed by more than one in a hundred of the class of intending settlers. The ninety-nine have no power of selection. In order that all intending purchasers should enjoy an equal liberty of selection, it is indispensable that the seller should supply to all purchasers alike, such a knowledge of the qualities and situations of the land offered for sale as to enable them to exercise their own judgment. Without this knowledge, there is no liberty of selection; the self-interest, the unfettered operation of which is the principle of free trade, has no play: it is fettered by ignorance; and the choosing of different spots of waste land by a number of purchasers, instead of being a deliberate exercise of judgment by all of them, is a hap-hazard process, the result of which is nearly always disappointment, and loss of time and money. The disappointment and losses which attend upon this process, are the most serious impediment to the settlement of a waste country by means of the disposal of the land to settlers. In order, therefore, that intending settlers may enjoy a free and equal choice, the land must be so measured, mapped, and described, as to furnish a complete picture of it. This

is the survey. I shall have to point out presently the differences between an imperfect and a complete survey. Here it is only needful to say that completeness of survey by the seller is an absolute condition of that freedom of choice—of that effective operation of private interest—which belongs to the principle of free trade.

When the survey is complete, so as to afford to every purchaser the power of exercising his own judgment, there may yet be numerous and formidable impediments to the consummation of the settler's purpose, arising from erroneous proceedings in the mode of sale, and in the methods of marking out selections, and giving possession. All this is the business of the seller. How it is performed depends on regulations concerning the mode of sale, the mode of defining selections, and the mode of giving possession. efficiency of such regulations is as important as the completeness of the survey with a view to ample knowledge; and it is obvious, having regard to the free-trade principle, that they ought to be so framed as to prevent uncertainty and delay-as to afford the greatest facilities to the prompt and secure realization of the settler's unfettered choice. The suggestion of regulations for this purpose will constitute a large portion of my Report. I now only premise with respect to them, that in framing them, I have had constant regard to the same principle of non-interference with individual self-interest and private judgment, which dictates that the settler alone should be made the judge of what land he will settle upon, and that there should be a pictorial survey in order to give him a complete power of choosing.

I am desirous before entering on particulars to lay down a general rule which appears to me of the utmost importance. Supposing the mode of sale determined upon to be unexceptionable, and the survey so complete as to afford an instructive picture of the land offered to purchasers, there may still be excluded from the operation of the sale-regulations and the survey a great quantity of land which intending settlers would be desirous to purchase. Supposing the limits of a colony or settlement to be defined, then all waste land within those limits which is not laid open to purchasers, is land withheld from the liberty of choice which the principle of free-trade requires. Such land is called a reserve. Reserves are made from a variety of motives-from the mere caprice or fancy of irresponsible authority-from a notion in persons having authority that they can judge better than intending settlers as to the direction which settlement ought to take, and as to the spots in which it ought to be specially encouraged from carelessness and neglect on the part of those without whose active intervention the land cannot be open to purchasers—sometimes from corrupt motives, the object being to favour particular persons at the expense of the public, by forcing settlement into particular directions, and preventing it in others-but chiefly from the inadequacy of surveys. In New Zealand, the causes of reserves have been various, but they are now, as respects the Company's territory, confined to two - first, the non-extinction of the native title, and secondly, the want of surveys. I would beg of you to look for example at a map of the Wellington District, which comprises

the valley of the Hutt and the plains of the Manawatu and the Wairarapa. In every part of this region there is land which intending settlers long to obtain, and which thousands emigrating from this country would quickly purchase if the whole of it were laid open to their choice. Nineteen-twentieths of it, at least, constitute an immense reserve. Either the native title is not extinguished—that is, the land is not at the disposal of the Company-or, there is no survey with a map which would enable purchasers to select lands at pleasure. With the exception of so small a proportion as about one-twentieth part, the whole district is excluded from settlement and condemned for the present to sterility. This I know is an extreme case, but it therefore the better illustrates Notwithstanding natural advantages, a principle. which I am sure that no colony of modern times has possessed in a higher degree, the settlement of Wellington stagnates as respects colonization, and is a mere commercial depôt by reason of the central position and excellence of its principal harbour; when, if its forest-hills and grassy plains were laid open to colonization, it would surely receive a yearly accession of emigrants equal probably to its actual population, and would exhibit an admirable progress in cultivation, wool-growing, and general wealth. A settlement with every natural element of prosperity and progress, is kept down and stifled by nothing but an immense reserve of its waste lands. Every reserve of waste land, whether in New Zealand or in any other colony, necessarily operates in this way; it is, in proportion to its extent, a bar to prosperity and a discouragement to the emigration of capital and

people: in virtual effect, it is exactly like a law for checking the increase of production and wealth, and for prohibiting emigration on a large scale. subject of the extinction of the native title in New Zealand, so as to lay open to settlement all land which the few natives necessarily leave in a state of waste, does not belong to the present inquiry; but I am so deeply impressed with a conviction that none of the Company's settlements can prosper in which this subject shall not have been dealt with and disposed of by the government, that I feel bound to express that belief. The work which I have undertaken for the Company, will be really inapplicable to those of their settlements in which the native title shall not have been generally extinguished. As respects such settlements, the promulgation of a perfect system of land sales and surveys would be a pretence when it was not a delusion or a snare. I shall take for granted, therefore, that measures are in progress for really placing the waste land in the Company's settlements at the disposal of the Company, or, in other words, for rendering a Report like this really applicable to those settlements: and I beg leave to state distinctly, that throughout this Report I shall proceed on the assumption, that the waste lands of the Company's settlements will be really open or subject to the regulations which the Company may frame for disposing of land to settlers. Assuming this, there remains the question of reserves occasioned by want of survey. This is not the place in which to explain the manner in which the absence of a survey operates as a reserve. It is sufficient for my present purpose to make the statement. If the statement is correct, it would be idle for the Company to frame a system of land sales and surveys without being prepared to carry the system into effect; and no beneficial system can be carried into full effect, unless in every settlement it be applied to all the waste land within the settlement, out of which purchasers may desire to make their selections. The system which I am about to propose, is based on the assumption that no waste land in a settlement will be withheld from its operation. Its main principle being liberty of choice, it would be found inapplicable if accompanied by the most effectual of restrictions, which is the exclusion from survey of important portions of the territory. The system and the restriction would counterwork each other; or rather the restriction would nullify the system. I am right in this view, it follows that the system requires surveys co-extensive with the limits of the In order to give a perfectly free choice settlement. in any settlement, the whole of the waste land within the settlement must be surveyed. I am aware, of course, for it is obvious, that this mode of proceeding involves a greater expense for surveys at the outset than has commonly been incurred in British colonies -an expense more resembling that which the United States have found indispensable in their systematic measures for the disposal of waste land. But I am persuaded, and shall I trust be able to satisfy you hereafter, that the greater expense at the outset, which the liberty of choice requires, is an economy in the long run; that if all the land of a settlement be surveyed at once, the cost of survey is very much less per acre, than if the land be surveyed bit by bit at intervals, fresh surveys being undertaken only when required in order to supply the market with fresh land. The question of cost has had my most careful consideration, but it has been the question Satisfied that a sufficient outof the whole cost. lay in the first instance is economical in the long run, and above all that it is indispensable to the effective working of any good plan for the disposal of waste lands, I have not been deterred by the consideration of immediate cost, from recommending the plan which appears to me to be the best. plan, inasmuch as the Company has many distinct settlements, involves, no doubt, a very considerable immediate outlay for surveys; and I am anxious once more to impress on you that the plan cannot work well unless the Company be prepared for such outlay.

Considering, however, both the possibility that funds may be wanting for the immediate extension of survey to all the waste land within each settlement, and that, at all events, some time must elapse before so many and such extensive surveys can be completed, whilst during the interval many persons desirous of acquiring land would be altogether precluded from doing so if they had to wait for the complete survey, I intend to suggest in the proper place an inferior and makeshift process, which might be resorted to until the perfect survey was completed.

The necessity of a perfect survey comprising all the waste land within each settlement, becomes the more plain when one reflects, that New Zealand has turned out to be a country eminently suited for pastoral production. So large a portion of the Islands is now known to consist of grassy plains abundantly watered,

not subject to droughts, and entirely free from noxious animals, that this colony may be considered eminently fit for the rearing of live stock in herds and large flocks, and especially for the growth of that fine wool which finds a ready market in Europe. Pastoral husbandry, in a country where the food of cattle and sheep is furnished by nature, requires, comparatively, the employment of a small amount of labour. pursuit, therefore, inasmuch as labour is necessarily scarce and dear in all new colonies, will yield in New Zealand greater returns to capital than any other. Although in New Zealand the cultivation of land will afford ample subsistence and a comfortable home to those who confine themselves to that pursuit, it will not. I am persuaded, until labour for hire shall become more plentiful and constant than it is likely to be for ages, yield a large surplus produce, or any great produce for exportation. The occupation productive of exportable commodities, and by which money will be rapidly made—on which the wealth of the colonists must chiefly depend—will be pastoral husbandry. It is certain, therefore, that capital will be mainly invested in this occupation, if due facilities for investing it properly be afforded; and very desirable is it for the colony, that the capital of settlers should be mainly invested in this the most profitable of occu-Hitherto, pastoral husbandry has been greatly impeded and discouraged in New Zealand, by the difficulty, and, in most cases, the impossibility, of obtaining land on a secure tenure for pastoral purposes. The quantity of land required by each settler with a view to rendering the natural pasturages productive of wealth, is so very much larger than the

quantity required by each settler for agricultural purposes, that the non-extinction of the native title and the want of surveys, as respects the whole country, with the exception of a few spots where agricultural settlements have been formed, have operated as a bar to that investment of capital which alone, for years to come in New Zealand, can yield large returns. without dwelling on the effect of the native title in preventing the secure enjoyment of natural pasturages by the colonists, the free selection and secure enjoyment of this kind of property requires an accurate survey before selection, as imperatively as in the case of land desired for residence and agricultural occupation. The colonist intending to invest his capital in herds and flocks, stands as much in need as the agricultural settler of that knowledge of the country, which a good survey and map can alone furnish. Whatever the reasons which call for a good survey and map with a view to agricultural occupation, the same apply equally to pastoral occupation. It is needless to repeat those reasons. Pastoral occupation differs from agricultural, as respects the necessity of previous survey, only in this, that the tenure of pastoral land would be temporary, and the quantity required very much larger. It is this greater extent of land required for pastoral purposes, which especially demands a previous survey of all the waste land in a settlement. Any reserve occasioned by want of survey would be a more mischievous restraint upon pastoral than upon agricultural colonization. And, moreover, it should be borne in mind that pastoral occupation is the pioneer of agricultural. In such a country as New Zealand, it is the flock-owner who

opens the country to the agriculturist: whatever impedes or encourages the one, ere long impedes or encourages the other. On the whole, therefore, it appears to me that the prosperity of New Zealand, in all the Company's settlements, depends upon a perfect survey of the whole of the land in every settlement. When that work shall be completed, the capabilities of the islands as a field of colonization will have a fair trial; until then, the endeavour to colonize cannot have satisfactory results.

In order to conclude the preliminary matter which I imagine ought to be submitted to the Court of Directors, I will now mention the division of my subject into branches, which I intend to observe.

Although, in order to give effect to the principles before laid down, it is necessary (except for the temporary and make-shift process to which I have alluded), that survey should precede occupation, there appears to be no necessity for completing the survey before any land was sold. Or rather, whether or not survey should be required before sale, depends upon the mode of sale. I propose, therefore, to consider the mode of sale before entering on the question of surveying. The mode of sale will form one main branch of the whole subject; and this will be subdivided into the sale of a permanent or freehold property, and the sale of temporary rights of pasturage. The second main branch will consist of the mode of surveying, describing, and mapping. The third and concluding branch will consist of the selection of land by purchasers, giving possession, and completing the title.

- I. The mode of sale—subdivided into two branches—namely,
  - 1. The sale of freehold land.
  - 2. The sale of right of pasturage.
- II. The mode of surveying, describing, and mapping.

III. The mode of selection, giving possession, and completing the title.

T.

### MODE OF SALE.

### 1. THE SALE OF FREEHOLD LAND.

In order that the Company should determine on the best mode of sale, and still more with a view of explaining to the public, both at home and in the colony, the grounds of their determination, it appears expedient to set out by sufficiently defining the objects which the Company has in disposing of waste land by sale. It has been a common error of colonizing authorities to confound their objects in selling waste land with those of the vendor of a private property in land. The latter has indeed but one object—that of obtaining the highest possible price. Before proceeding to sale, he fixes upon a minimum price below which he will not sell; and this he determines by a valuation, or estimate of supposed market value. His estimate of value is formed on the annual rent that the land will yield, on the state of the actual demand for land in proportion to the supply in the market, on the current rate of interest which affects the number of years' purchase, and on the probable competition among buyers, arising from a variety of causes. That competition, which he invites by all the means in his power, ultimately determines the selling price. But the Company has no such objects: its general object is to promote colonization; and it therefore aims not at selling land for the highest possible price, but at selling as fast as possible the greatest possible quantity of land: for selling in this case is equivalent to colonization. Now, in order to sell as much and as quickly as possible (which, I repeat, is the one object of the Company), competition is not required: on the contrary, if competition were produced by the only possible means—that is, by limiting the quantity offered for sale so as to make it less than the demand—land would be sold in smaller quantities and at a slower rate than if the quantity offered for sale were unlimited, and the price required such as not to discourage buyers. It follows that, supposing the price required to be such as to encourage buyers, the disposal of the purchase-money being considered, the quantity offered for sale should be unlimited, and that the price required should be a fixed price. Every departure from this principle-every attempt, in other words, on the part of colonizing authorities to avail themselves of competition by limiting the quantity, and setting buyers to bid against each other for particular lots, whether by means of private treaty, or tender, or auction-has mischievous effects as respects the progress of colonization. less the quantity offered for sale be so limited as to produce competition, the aiming at competition does not accomplish its object; it only produces delay and uncertainty, which, as they are the greatest evils to which the settlers of a new country can be subjected, operate as a grievous impediment to colonization.

This happens in the United States, where the quantity offered for sale being very large, the land is actually sold for the most part at the upset price, and the only effect of putting it up to sale by auction is to harass the buyers by delay and uncertainty. If the quantity offered for sale be really so limited as to produce competition, several evils ensue besides the delay and uncertainty. In proportion as the competition is effective in raising the sale price above the upset price, the buyer,—that is the settler—is taxed, and the capital which he wants for settlement is diminished. checks colonization: nothing does so more effectually. The great object of the Company therefore, instead of being promoted, would be defeated by producing a real competition. The upset price for auction being such as would not deter purchasers, and all above that price which competition might occasion being an evil, the reasonable conclusion is manifest, that the proper upset price should be the price at which the Company would sell without resorting to competition at all. a fixed price—that is, so much per acre, neither more nor less.

As the only alternative of a fixed price is sale by auction, as the plan of sale by auction is pursued in the British colonies generally and in part of New Zealand in which the Company has no jurisdiction as a colonizing authority, and as the preference between auction and fixed price is still an unsettled question, I am induced to state more in detail the objections to auction which I have been led to form by witnessing the operation of that plan in the Australian colonies, and which are, indeed, objections universally held by people in the colonies who have attended to this subject.

1st. The selector of land may be outbid beyond his means, so as not to realize his choice at all; and his exertions and time in selecting are thus thrown away; his exertions and time being again called upon to make a fresh selection, perhaps with the same results. Perhaps in the majority of cases, the settler would be deprived of all freedom of choice, being compelled to take land to which he had strong objections, from having failed in acquiring the land he had selected, and yet being obliged to have some land. Such results are, in every way, calculated to paralyse the energy and judgment of the settler.

2ndly. The indefinite amount of price an intending purchaser may have to pay for his land, is another grievous objection. He is led on by degrees, hoping to obtain the land even at great sacrifices, until he is so impoverished as to be disqualified for success as a settler.

3rdly. By the auction plan, the settler is liable to be plundered by jobbing and roguery of all sorts. The surveyors, by means of their information derived from having made the original survey, have it in their power to job; officials of all sorts connected with the government possessing this accurate information can job; the speculating capitalist by his command of money can job; and the bona fide settler, the man ready and anxious to lay out his money in land and improvements upon it, has to buy off these harpies. And often when his means are insufficient to outbid them, they sell him the land on credit at an exorbitant price, and ruin him by the heavy interest.

4thly. This most dishonest competition gives rise to unneighbourly and vindictive feelings amongst colonists. The man who is partially ruined by a neighbour running him up in the purchase of land, never forgets the injury; his children inherit the dislike; and this state of things is perpetuated to the manifest destruction of that kindness and desire to aid one another that should exist amongst settlers.

5thly. Lastly, the delay occasioned by the necessity to have the land advertised for some time before the auction takes place, in order to give it publicity, and enhance the price, is death to the colonist, who must be at expense for himself and family every day that he is not in occupation of his land. What he is obliged to spend in this way, would, if he could obtain his land immediately on selecting it, perhaps be the making of him; but he has no remedy; wait he must, and in a state of idleness, until the auction takes place.

Supposing the price to be fixed, the question remains whether it should be uniform, or varying according to the quality and situation of the land. I know of but one argument in favour of a varying price: it is that, inasmuch as land varies in quality, position, and value, therefore different prices ought to be affixed to different sections; prices, that is, which would represent the differences of value: whatever the value of any section, such should be the price: the Government or Company ought to put upon every section a price determined upon by an estimate of its value. But this argument is based upon the supposition that the objects of the Company in disposing of waste land are the same as those of an individual selling his private property in land. Referring to the one object of the Company,

which is to colonize as fast as possible, it is not an object with them to obtain a price equal to the value of the land sold. Their object is to sell the land as fast as possible; and this they can only do by offering the land at such a price as, considering the disposal of the purchase-money for the advantage of the buyer, will most conduce to the sale of land. Value is not one of the elements of their calculation. Neither, if it were, could they ascertain the value of each section. Waste land, if offered in unlimited quantities, possesses no market value until capital has been expended upon it. In order to give it a market value whilst it remains in the waste state, the quantity must be limited so as to produce competition. But I have endeavoured to show before, that the producing of competition by means of limiting the quantity would be fatal to the main object of the Company, which is to colonize as fast as possible. Supposing the quantity offered for sale to be unlimited, the attempt to put a price upon different sections according to their different values, would be a pretence or a delusion. The different prices would really be fixed arbitrarily according to the fancy of the pretended valuer. And again, supposing that waste land offered in unlimited quantities really possessed different market values, how could the Company ascertain them? By what rule could it determine on the various prices? There is no rule by which it could be guided; and if, misled by confounding the objects of the Company with those of a private vendor, it insisted on obtaining various prices for various portions of land, it would be led to resort to

sale by auction as a means of getting at market value. But, if the quantity offered were unlimited. auction would not be a means of getting at market value: nothing could be a means of getting at what did not exist. After all, then, except as auction would make a false show of being guided by the consideration of market value, the land (supposing always that it was offered in unlimited quantities) would only sell for the upset price, which is a fixed price; and if the upset price varied according to quality and situation, it could only be determined arbitrarily by the fancy of the person employed to fix it. The notions of that person and of intending buyers would be widely different; and whenever the price of a section fixed by him was deemed excessive, as it would nearly always be except as to the sections on which he put the lowest price, the whole proceeding would operate as a discouragement to purchasers and a hindrance to colonization. I conclude, therefore, that the only proper course is to put a fixed and uniform price per acre upon all the waste land in a settlement. If there were land in the settlement for which this price was deemed excessive, such land would not be sold at first: but if the uniform price were not deemed excessive for the more fertile and better situated sections, these would be sold; and the progress of settlement and the increase of population would gradually confer upon sections of inferior fertility and position, a value equal to the uniform price; and this price would then be obtained for them. This happens every day in new colonies. Land which at first nobody would take at any price, becomes

desirable, and is then sold for the price which at first was cheerfully paid for only the most fertile and best situated spots.

The question of what the uniform price ought to be is one depending, as it appears to me, upon considerations into which it is not my business to enter. The price of waste land, according to the principles of the system adopted by the New-Zealand Company, is not really paid for the land, but is a contribution by all the buyers towards objects of the utmost advantage to themselves. If the price were imposed, and the proceeds of sales not employed for the advantage of the buyers, it would be a tax upon colonization, and therefore indefensible. Viewed as a contribution for purposes advantageous to the buyers, the considerations upon which its proper amount depends are foreign to the subject of this Report. I allude to them, therefore, only for the purpose of suggesting that in a country of so uniform a character as New Zealand, the best fixed uniform price for waste land in any settlement would probably be the best for all the settlements: and unquestionably a uniform price for all the settlements, whilst it would be most convenient for the Company, would also appear the most fair, whilst it would not prevent individuals or bodies colonizing under the Company such as the Otago and Canterbury Associationsfrom re-selling at a higher fixed uniform price with a view of obtaining from every settler a larger contribution towards public objects in the settlement. In what manner a uniform price in all the settlements, to be required by the Company, whether from settlers or colonizing bodies, would promote the simplicity and efficiency of the Company's operations, will be made plainer when I come to the subject of the selection of land by purchasers from the Company. At present, I earnestly recommend that the Company should adopt one fixed price per acre, at which it will sell land in every settlement, and without distinction as to the quality or situation of the land in any settlement.

This general recommendation involves another of great importance. The plan of a uniform price is of course inconsistent with that of dividing waste land into Town Lots, Suburban Lots, and Rural Lots, and putting different prices upon the several varieties. This latter plan has been adopted by most colonizing authorities, including the New-Zealand Company before they were constituted an agent of the Government for the disposal of waste land; but there are, I conceive, very grave objections to it. When the motives with which this plan has been resorted to are examined, they may be traced to the common error of colonizing authorities before alluded tonamely, that of confounding the objects of a colonizing government in disposing of waste land with those of a private vendor. It has been supposed that more money could be obtained by offering Town, Suburban, and Rural Lots, at different prices, than by offering all the land at one price per acre, and leaving the buyers to divide the land afterwards, if they pleased, into various kinds of property: and, doubtless, as respects a given extent of land, more especially if the quantity were limited below the demand, more money might be obtained by this sectional division with different prices, than by offering all the land at one

price. But it is not, let me repeat, the object of a colonizing Government, or of a Company colonizing for the Government, to obtain as much money as possible for a given quantity of land. Their main object being to colonize as fast as possible, they should be careful, instead of extracting as much money as possible out of the pockets of settlers, to extract as little as possible consistently with accomplishing the purposes for which a price is put upon waste land. This abstinence from obtaining more money for waste land than is absolutely necessary, is one of the means by which the main object of the Company may be best promoted: another means is the observance in this matter of the principle of free trade, or laissezfaire, by leaving to individual judgment and enterprise the business of establishing towns and dividing waste land into Town Lots, and Suburban and Rural In this respect, the Government of the United States, which is the greatest and most successful of colonizing authorities, sets us a valuable example. That Government sells waste land as waste land; it merely performs a necessary and simple function of government, without undertaking the speculative and complicated business of laying out towns, and giving new values to different portions of land. This business it leaves wholly to individuals, whose freedom to engage in it, because the Government abstains from it, tends powerfully to bring capital into the work of colonization, and to accelerate the progress of settlement. If the Company should so manage in New Zealand that settlers and land-speculators shall at all times be able to obtain waste land in unlimited quantities, with a free choice, and at a

known, that is, a fixed uniform price, the colonization of the Islands, including the formation of towns and villages, would proceed more rapidly, and the Company would sell more land, by means of having given this freedom and encouragement to private enterprise. than if the Company itself undertook a sort of business which private enterprise alone can perform in the manner most serviceable to the community. And, lastly, by this course, the Company would save the great cost in surveys, and the great trouble and responsibility which belong to the work of marking out Towns and Suburban Sections, and putting different prices upon these varieties of position. As respects the simplicity of its operations, and the cost of its establishment for the disposal of land, including surveys, the Company is deeply interested in adopting the practice of the United States; and I am persuaded that by doing so it will most effectually promote its main object, which is the sale of waste land and the progress of colonization. The saving of trouble by avoiding needless complication, and of money by rendering the work of surveying as easy as possible, will be made more apparent under the head of surveys.

There remains to be stated, however, another argument in favour of the uniform price, to which I beg particular attention, because the mode of selection, survey, and giving possession, which I am about to recommend, depends in a great measure on the adoption of the uniform price in selling. If the Company sold land at different fixed prices in the same settlement, the price must, previous to the selection and sale, be affixed to each section; and before selling any section, and before

allowing any one to select it, the size and form of the section must be determined and marked upon the map, if not also on the ground; for, selling at different prices, the Company must necessarily offer for sale specific and designated portions of land. The whole country, therefore, would have to be marked out into sections. As respects the size and form of sections, not private judgment and enterprise, not the opinion of the settlers or speculators, who could alone tell what size and form of section would suit their varied purposes, but the surveyors of the Company, having no personal interest in the matter, would really determine the size and form of every property in the settlement. would also be their business to put a price upon every one of these properties. These two duties—that of determining the size and form, and that of fixing the price of every property—it is impossible to suppose that public officers, having no private interest in the matter, could be made to perform with advantage to the community; and the performance of them, however carelessly and improperly, would involve an enormous amount of attention, labour, and expense, for the Company, all of which may be spared if the uniform price be adopted. The Company, offering land at a uniform price per acre, would receive applications for land in various quantities, and would receive the purchase-money at the same time. In return for the purchase-money, the Company would deliver to the buyer an order for the quantity of land paid for; and with the land-order in his hand, the buyer would proceed to select for himself, as respects both form and situation, the specified quantity of land. The Company would, in fact, sell, not specific portions of land, but only land-orders for quantities specified by the buyers; and thus the whole business of determining the extent, form, and situation of sections, would be left to private enterprise. The greatest improvement that I can imagine in the conversion of public waste land into private properties, would depend upon the plan of selling at a uniform as well as a fixed price.

#### 2. THE SALE OF RIGHT OF PASTURAGE.

It has been thus far supposed that the only property in land acquired from the Company would be of that absolute kind which is commonly called freehold; and I have now to inquire into the disposal of another kind of property-namely, temporary rights of pasturage. If the Company refused to dispose of any land except as freehold property, and required for all such property a price sufficient for the objects with which any price can be properly imposed upon mere waste, the important business of pastoral husbandry would only be carried on by squatters without a title, and would be most seriously impeded. Considering the pastoral nature of the country, and that the stock-keeper is the best pioneer of settlement, it appears as important to adopt the best mode of disposing temporarily of the extensive pasturages of New Zealand, as to settle the best mode of selling freehold property. It appears to me, after much reflection on the subject, that the process that would be the best in one case, would also be the best in the other. Whatever recommends the plan of allowing individuals to choose for themselves as respects situation, quantity, and form, the land in which they desire to attain a permanent property, also recommends that the same liberty should be given with respect to the selection of land on which to exercise temporary rights of pasturage. It is, however, as to facility and freedom of selection only, that the two cases are alike. The grounds on which it has been deemed advantageous to a colony that a considerable price should be required for freehold property in waste land, do not apply to rights of pasturage. The property in rights of pasturage must be only temporary and of uncertain duration; for it is especially necessary that the right of pasturage over any tract shall never be such as to prevent or impede the acquisition of freehold property within the tract by others than the holders of the right of pasturage. The right of pasturage would be granted subject to determination, upon brief notice, as respects any land in the tract which anybody chose to select for purchase as freehold property. I conclude, therefore, that the price which the Company may require for rights of pasturage, will not be more than sufficient to cover the expense incurred in bestowing this temporary and uncertain property. In order to determine in what manner this price should be paid, it is requisite to decide a question which I will now examine separately.

This question is whether or not rights of pasturage should be granted in virtue of freehold purchases, every purchaser of freehold being entitled without payment to a certain quantity of pasturage in proportion to his freehold acquisition. If the pasturage were so granted, it would be paid for in the price of the freehold. But there are, I think, very serious objections to this mode of proceeding. For many years

to come, there will be vast tracts in New Zealand where capitalists will be disposed to embark in pastoral husbandry, but not to purchase freehold land; and if the law were that pasturage rights could only be acquired by means of purchasing freehold property, the investment of capital in pastoral pursuits would be grievously impeded. The necessity of purchasing freehold when freehold property was not desired, but merely as a means of acquiring pasturage, would in every such case operate as a monstrous tax upon pastoral industry, since the capitalist in order to invest any given sum in herd and flock-owning with every prospect of gain in that pursuit, would be compelled to invest another sum in acquiring property of no use to him, and for which there was no demand, and therefore with certain loss. jection to making freehold purchase a condition of obtaining pasturage rights, appears to be fatal. it has been suggested that whilst pastoral rights might be acquired without purchasing a freehold, it would be well to attach to freehold purchases a certain amount of pasturage rights. The addition of pasturage rights, it is said, would be a boon to the purchaser of freehold, tending to encourage the investment of money in freehold purchases, and therefore to promote colonization. There appears to me to be a fallacy in this view of the subject. If pasturage rights independent of freehold purchase might be acquired in unlimited quantities without payment, there would be no boon to the freehold purchaser in attaching pasturage rights to his purchase: and whatever was the payment required for pasturage rights, independently of freehold acquisition, the boon to

freehold purchasers would consist of making them a present of so much: in other words, the price of freehold land would really be less, by the amount of the value of the attached pastoral right, than the price nominally paid for freehold only. This, then, would only be an indirect and disguised method of putting a lower price upon freehold land. If the price were the proper one, it ought not to be so lowered; and if it were excessive, the error of having too high a price ought to be openly corrected by lowering the price of freehold. It is surely right to assume that the price of freehold will not be too high. for the purposes of colonization. Assuming this, there is no call for a boon. Moreover, if the boon were conferred on future purchasers of freehold, all former purchasers would complain of injustice to them, and the Company would be required to attach a certain amount of pasturage rights, by way of present, to each section of the land sold. lastly, the connexion in the case of each property between freehold purchase and pastoral rights, would greatly complicate the business of the Company, which it is an object of the last importance to render as simple as possible. Upon the whole, therefore, I strongly recommend that the acquisition of temporary pasturage rights should be kept perfectly distinct from the acquisition of freehold land, except in the case to which I will now proceed.

It can hardly be repeated too often that in such countries as the Australian colonies and New Zealand, the pastoral capitalist is the best pioneer of settlement. He discovers the most fertile districts, ascertains the different qualities of the soil, makes

some kind of road or beaten track from a settled district, and forms a homestead, which, in conjunction with other homesteads in the neighbourhood, creates in time a demand for the occupations of a village. such as those of the blacksmith, the miller, the carpenter, and the storekeeper. Above all, he improves. by means of his herds and flocks, the land on which He becomes in time attached to the neighbourhood, and desirous of settling there permanently. He requires, for properly carrying on his pastoral occupations, a farm of cultivated land; and although, at first, he is satisfied to enjoy only a temporary and uncertain property in the pasturage of the land on which his stock feed, he always longs to acquire a permanent property in some of it, and is made uneasy by the fear that he may be ousted from it altogether by the spread of settlement, and by the demand for freehold land. It is most desirable. therefore, that the pastoral capitalist should, whilst not allowed to prevent others from acquiring freehold rights within his pasturage occupation, have every facility for acquiring such rights himself. Though not permitted to exclude others, he ought to be free to serve himself first. This liberty of freehold acquisition for the pastoral occupier would be secured by giving him a prior or pre-emptive right of purchase within his pasturage occupation. If any other person applied for freehold land within the grant, notice thereof should be given to the pastoral occupier; and if he chose to buy the land applied for by another, the preference should be given to him. By this means, the pastoral occupier would be secured in the permanent enjoyment of any land upon which he

had invested money in cultivation and buildings, or which he had otherwise improved: he would feel before making such improvement, that there was no danger of his being ousted from the improved property after its improvement at his expense: and this security would be a great encouragement to the enterprise of the pastoral settler. On the other hand, the agricultural settler could not complain of the preference given to the pastoral occupier: he would feel that if the pastoral occupier chose to avail himself of the preference, it would be but just that he should be enabled to do so: and if the pastoral occupier did not avail himself of his prior right, then all the land within the pasturage occupation—even that part of it which had been improved by cultivation and building-would be open to selection and purchase by all other persons. The effect of the whole system would be, as respects both freehold purchase and pasturage occupation, that the man who desired to settle as an agriculturist, would be free to please himself; that the man who desired to confine himself to pastoral occupation, would be free to do so; and that the man who desired to combine agriculture and settlement with pastoral occupation, would be equally free to indulge his own taste and judgment.

Supposing the mode of sale, with respect both to freehold and pasturage, to be such as I have indicated, it remains for me to suggest a particular regulation, which seems to be indispensable. The Company would sell orders for land or pasturage, the extent named in each order being in proportion to the sum paid by the buyer. To this extent there would be no limit. Every

one might obtain an order for any quantity of land or pasturage to be taken in one block, or any number of orders for land or pasturage to be taken in different The extent of the block named in an order would have no limit but the pleasure of the buyer. As regards quantity, the Company would lay down no maximum. But it would be absolutely necessary to lay down a minimum. If there were no minimum (to suppose extreme cases, by way of illustration), a buyer might obtain an order for five acres, or half an acre, or even a foot of land. If many buvers obtained orders for very small quantities of land, the expense of putting them in possession would be enormous; for every block, whether great or small, must of necessity be marked both upon the map and upon the ground before possession could be given. If the blocks were exceedingly small, it would also be impossible to mark them on the map at all, unless the scale of the map were preposterously large. Some minimum limit of the size of blocks must, therefore, be fixed. In order to infringe as little as possible on the absolute liberty of choice as to quantity, which should be preserved if the preservation of it were possible, the minimum size of blocks should be as small as conveniently might be. Opinions may differ as to what this minimum ought to be. My own opinion, founded on extensive experience, is that a minimum of one hundred acres taken in one block would not hurtfully interfere with liberty of choice and the progress of settlement; and that it would guard the Company and the colony against the difficulty and evils, for averting which some minimum is requisite. Supposing 100 acres to be adopted as

the general minimum, it would still be necessary to permit exceptions from the rule, in cases where the appropriation of land by purchasers had left unappropriated blocks, as interstices amongst private properties, of less than 100 acres each. In such cases, of course, the purchaser would take the whole of the unappropriated block, and would pay for it at the rate of the uniform price per acre. A similar exception should take place in the case of islands of a less area than 100 acres. But all this applies to freehold only. With respect to pasturage, the price of which would be so very much less in proportion to the cost of survey and marking selections, I think that no lease should be made for a less quantity than five hundred acres; or, that if less should sometimes be required in consequence of there not being five hundred acres unappropriated at that spot, then that the occupation should not be sold at a less price than the fixed price of five hundred acres.

Although I have thought it right to abstain from entering into the questions of labour, wages, and emigration, on which the proper uniform price of freehold land would depend, still, as the proper uniform rent of pasturage would depend upon a very simple calculation which I ought to be qualified to make — namely, how much, all things considered, would probably be sufficient to cover the expense of putting the pasturage regulations into execution, or, in other words, the expense of laying the pasturages of New Zealand open to free and facile occupation—I venture to name the rent which it appears to me would be neither too low nor too high for that purpose; whilst I am persuaded that it would not in

any measure operate as a check to the investment of capital in pastoral husbandry. That rent is 1*l*. per annum for every hundred acres.

As it is indispensable that the full price of freehold land should be paid by the buyer before his property was acquired, because if any credit were given the objects of a price would be more or less frustrated, and because the expense and difficulty of collection would be very great, so the rent of pasturage ought, I think, to be paid in advance: and inasmuch as it would be hardly possible for the Company to collect the numerous small amounts of rent for pasturage, every pasturage occupation should be held on the condition of the annual payment of rent in advance by the tenant at the nearest Land Office; and if the rent were not duly tendered, the lease should be forfeited.

With respect both to sales of freehold and to leases of pasturage, there remains for consideration the manner in which priority of selection should be determined amongst the holders of land-orders and pasturage licences. This question is very much simplified by adopting the plan of a uniform price and rent. A district being declared open to selection, if one man applied for either kind of property and made the requisite payment, he would receive his land-order or pasturage licence, and would be free to select the land or the pasturage where he pleased without competition from any body. This would be the general mode of proceeding. The delivery of the land-order or pasturage licence would confer an immediate right of choice; and all such rights would be obtained and exercised in the order in which they were applied and paid for; the principle being "first come, first

But it might occasionally happen that two or more persons would apply at the same time for sections comprising the same spot. At the first opening of a district, indeed, many people, probably, would apply for the same spot at the same time. In every such case, the claims of all applicants would be equal in point of justice: there could be no reason of equity or policy for preferring any one applicant to any other. Yet, by some means, an order of choice must needs be determined. Which of the applicants obtained first choice would be of no importance, provided that he obtained it fairly. All would know that, of necessity, one must be preferred; and none could complain if the preference were determined by a means that was perfectly fair towards all. Any means that by possibility admitted of favour to one at the expense of the rest, would be violently objected to, and would give occasion to numerous evils which require no particular description: any means that was perfectly fair towards all, would be cheerfully accepted by all, how much soever the disappointed applicants might regret their disappointment. The conviction of being treated with perfect justice and fairness would leave to the disappointed applicants only that sort of regret, which is felt at inevitable disappointments for which nobody can be blamed. There is one means, and I am unable to discover any other, by which priority of selection might be determined with perfect fairness amongst several persons who applied at the same time for the same piece of land or for land-orders in the same district; it is a means which, because it partakes of the character of accident or fate in which no influence

could be exerted by the will of man, would be received by all as a decision of which nobody could complain. This is determination by lot. It frequently happens in human affairs, that a decision must of necessity be made between two or more persons, and the strongest reasons exist for making the decision without personal preference, or with entire equality as respects persons; and in these cases (such as drawing for the militia, pricking for sheriffs, and balloting for priority of motion in the House of Commons), recourse is always had to determination by lot. The principle of this mode of proceeding, though sometimes confounded with the gambling principle of a lottery, is perfectly distinct from it. In this case, there is no gambling. The competitors become such not intentionally like the buyers of lottery tickets, but by a mere accident which arises in the pursuit of a lawful and laudable business. It is a competition wholly unforeseen by the parties to it, and decided at the very moment when it takes place. Neither is money lost or won by it. The result of the determination by lot is, that one of the competitors makes the investment he intended, and that the others make no investment on that occasion. It appears, therefore, that the only objection that has been made to the determination by lot, was suggested by a verbal similarity in cases really quite different. This only objection not standing, there is nothing to countervail the recommendations of the plan: and even if there were valid objections to the plan, they would have to be considered only as drawbacks detracting from its perfection; for it may, I think, be said, after the careful and ingenious investigation that this subject has received without the discovery of any other plan, that this is the only plan by which, in the nature of things, the object of perfect and satisfying fairness can be surely accomplished. I would therefore recommend, that whenever it shall so happen that competition arises between two or more persons for the same piece of land, or for priority of choice in any district just opened to purchasers, by means of their applying for it at the very same time, the priority of choice shall be instantly decided by lot. Practically, the supposed case of competition will hardly ever arise, except now and then when new settlements are formed, and a number of people have obtained their land-orders and pasturage licences by purchase before a district is laid open to selection.

Supposing the Company to adopt the minimum which I have proposed for the extent of land comprised in any sale or lease, it remains for me to describe some other limitations of the absolute liberty of choice, to which allusion has been made before. has been observed that some limitations are indispensable, in order to prevent the liberty of choice enjoyed by one purchaser from operating as a hurtful restriction on the choice of others. The object in view is equal liberty for all; an object which can only be obtained by means of some restriction for every one. If there were liberty to select land in whatever form of sections every purchaser pleased, the sections chosen would be of such infinitely varied forms, and of forms so very difficult to mark out with accuracy upon the map and upon the ground, and still more so very difficult to describe in the title, that the whole operation of giving possession, which comprises marking out the section upon the map and upon the

ground, would be so complicated and expensive as almost to stop the work of colonization. Long experience has established that the rectangular form is in all respects the most serviceable. More than any other it is conducive to accuracy, to facility of designation on the ground and map, and to facility of description for title. I recommend, therefore, that all sections, whether of freehold or pasturage, should be of the rectangular form as far as possible. They might be absolutely so except in one case. The case of exception is that in which one of the boundaries of a section was the irregular line of a road, river, or coast. In such cases, the amount of deviation from the strictly rectangular figure would be such as was prescribed by the irregularity of one of the boundaries; and as these irregular lines of boundary would be permanent marks, the deviation from a strict regularity of figure would occasion but little practical inconvenience.

In order to prevent any injurious monopoly of frontages upon roads, rivers or coast lines, it is necessary to prevent the selection of narrow stripes of land in those situations. Indeed, it seems desirable to prevent the taking of land anywhere in narrow stripes; for unless this were done, speculators might, at a small expense, acquire properties on the border of other properties, with the effect of cutting off the holders of those other properties from a desirable extension of their land, and of forcing them to pay for the removal of the obstacle. Every freehold section, therefore, should be of such a width in proportion to its length as to preclude the purchase of land except for use, or, in other words, to preclude

the purchase of land for the purpose of extortion. The proposed minimum area of sections being a hundred acres in one block, I think that the whole object would be accomplished by three simple regulations. First, land, taken in whatever quantities in front of a river, road, or coast line, should extend at least 54 chains 78 links from the frontage. Thus every section of 100 acres so taken would have side lines three times the length of the frontage; or would be three times as long as it was broad; and although one person might take hundreds or thousands of acres in a block, on a valuable frontage, every hundred acres of his selection would have the proportion of side line for single sections of 100 acres. Secondly, land, taken without any valuable frontage, should, whatever its area might be, extend 18 chains, 26 links, in the shortest direction, so that, the minimum area of sections being 100 acres in one block, whatever the length of a section might be, its breadth would be equal to the breadth of 100 acres taken upon a valuable frontage. Thus, nobody could obtain frontage land less than 54 chains, 78 links, deep from the frontage; and nobody could obtain other land less than 18 chains, 26 links, broad. Thirdly, but as the first of the foregoing regulations might be evaded by the taking of land according to the second regulation, not on a frontage, but so near to one as to obtain its advantages, whereby, virtually, frontage land would be obtained, not 54 chains, 78 links, deep, but only 18 chains, 26 links, deep, therefore a third regulation is expedient, as follows: Within spaces extending 54 chains, 78 links, from a river, road, or coast frontage, all selections should be made under the first regulation only; or, in other words, within the aforesaid distance from valuable frontage, selections under the second regulation should not be permitted. The effect of this last regulation would be that every selection of land not on a valuable frontage, must be made outside of a distance from frontage of 54 chains, 78 links; and thus all the valuable frontages would be preserved for disposal under the first regulation.

With respect to the temporary right of pasturage, one rule alone appears to be required; namely, that with a view to facility and accuracy of measurement, the rectangular form should be observed, except as deviation from it would be rendered unavoidable by the irregular boundary line of a river, road, lake, lagoon, or coast.

The five regulations, with respect to quantity, form, and requisite position as to valuable frontage, would be as follows:

- 1.—Sections to be taken in blocks having an area of not less than 100 acres, and of a rectangular form if possible.
- 2.—The frontage of every section of 100 acres, fronting upon a river, road, lake, lagoon, or coast, to bear the proportion to its side line of 1 to 3; or as 18 chains, 26 links, frontage is to 54 chains, 78 links, side line.
- 3.—Sections of a greater area than 100 acres, fronting upon a river, road, lake, lagoon, or coast, to be, throughout their extent along the frontage, not less than 54 chains, 78 links, in depth from the frontage.
- 4.—Any section not fronting upon a river, road, lake, lagoon, or coast, to be throughout its extent

18 chains, 26 links, in width; and no portion of such section to be less than 54 chains, 78 links, from a river, road, lake, lagoon, or coast.

5.—All selections under pasturage leases to be in one block, and of a rectangular form as far as possible.

In order to carry out the foregoing regulations as respects frontage, it would be necessary to take some precautions in making the survey, which I will mention in this place because the principle of them belongs to the subject of sale rather than to that of the survey. Frontages, consisting of coast line, lake shore, or river bank, would be marked by nature; but it would be the business of the Company to create, as it were, the frontage of roads, by marking out lines of road upon the ground and the map before the land was opened to selection by purchasers. It is a question to what extent this previous marking out of roads ought to be performed by the authority that disposes of waste land. The marking out of roads on the unappropriated waste is an anticipation of the future wants of the settlers, as respects ways of communication. To anticipate all those wants would be impossible, for three reasons; because, in the first place, the utmost sagacity could not foresee before the country was settled what amount and direction of roads would suffice for communication, and best promote it after the country became cultivated and full of people; secondly, because, if such anticipation were possible, the cost in trouble, time, and money, in marking out all the lines of road for a settled country would be so great as to eat up the price of the land, and more; and thirdly, because a large proportion of such innumerable marks upon the ground would surely be obliterated to the same effect as if they had never been made, long before the country was so far settled as to afford means of preservation for so many land marks. It is, therefore, necessary to limit the amount of road-marking on the waste. This operation must necessarily be confined to what are termed main roads. These are lines of road, the proper direction and utility of which could be perceived before the country was settled. The mode of determining such lines of main road belongs to another branch of my subject—that of the survey; and here, I have only further to say, that road frontage under the foregoing regulations, would consist only of the frontage upon such lines of road as were marked on the land and the map previously to the selection of land by purchasers.

It has been said that the other frontages would be marked out by nature; but there still remains an important question to be solved. About what were the lines of coast and lake shore, there could never be any doubt; but with respect to lines of frontage consisting of the banks of rivers, it is needful to determine what should be meant by the word "rivers." Throughout the greater portion of New Zealandindeed, wherever the land is available for settlement,—the country appears to be intersected not only by streams which are properly termed rivers, but by innumerable smaller streams or rivulets, which flow all the year with but little diminution of the bulk of water at any time. These streams are so very numerous, so near to each other, and so forked by smaller tributaries, that it would be idle to think of treating them as fitting boundaries of property. In many extensive districts, but few blocks of 100 acres could be selected, which were not intersected by a stream of this kind. As respects boundary, therefore, I would propose that the application of the foregoing regulations should apply to those larger streams only, which are properly called rivers. These, it would be the duty of the Survey Department to distinguish upon the map by a conventional mark. The conventional mark of rivers, properly so called, would point out exactly to purchasers to which streams alone the frontage regulations were applicable: such marks on the map would have the same effect in defining river frontage as the natural marks of frontage on coast lines and lake shores. It is difficult to conceive, without having witnessed it, how much evil, in the form of disputes and litigation, has been produced in the Australian colonies by the neglect of this precaution; and, assuredly, the precaution is more required in New Zealand in consequence of the greater abundance of constantly flowing rivulets.

### II.

## THE MODE OF SURVEYING, DESCRIBING, AND MAPPING.

It is hardly possible to conceive without experience the difference between a waste and a settled country, as respects the means of judgment concerning the capabilities of land. In a settled country, roads afford a perfect facility of observation; and every kind of knowledge about the land may be acquired from the inhabitants, to whom the experience of generations has been transmitted, and whose ideas on the subject are enlivened and made distinct by being associated with all the ideas of property, such as boundaries, produce. and value. Let it be supposed that the property of an English county were confiscated, and that all the land were laid open to be selected by a body of intending purchasers; in order that each of them should select the property that he would like best according to his means of purchase, they would not require a map or written description of the county; they could obtain without map or written description, merely by travelling about and asking questions, all the knowledge that they would need. The Ordnance map of this county would indeed be required by them for the purpose of pointing out elsewhere than on the spot. the selections which they had made; and it would somewhat assist their inquiries for selection; but they could well select without it by means of oral inquiry and personal inspection. Now suppose a waste country laid open for selection, but without map or written description. There has been no experience: there are no roads; there are not even inhabitants. Knowledge, with a view to selection, is unattainable. The idea of real selection under such circumstances is like that of arithmetic without numerals, or that of painting by the blind; it is not merely a fallacious idea, but a perfect misconception; there is, and can be. no such thing as that which is conceived by the imagination.

I insist so much on this difference between a waste and a settled country, because it must be fully appreciated in order to define the objects of the survey. A right definition of the objects of the survey is the more necessary in the present case, because the nature of the survey must always be in a great measure governed by the mode of sale, and because the mode of sale which I have recommended imperatively demands a kind of survey peculiarly adapted to it, and, therefore, as novel in its main characteristics as the mode of sale to which it would give effect. I must, therefore, examine with care this important question of the objects of the survey.

For this purpose, I beg your attention to the following extract from a recent and useful work on the Art of Surveying, Practical Geodesy, by Mr. J. Butler Williams, p. 199: "Colonial surveying is distinguished "from the usual land surveying, previously described, "by a marked difference in its objects. In cultivated " countries in which every portion of the land is claimed "by a proprietor or an occupier, and the surface of "which is divided into estates with known boundaries, " or separated into legal and ecclesiastical divisions, the "business of the surveyor consists in making, on a plan, "a faithful representation of the existing demarcations " and artificial objects, as well as of the natural features, "and in collecting and arranging all data which may "contribute to convey a knowledge of the physical "aspect of the country. In new colonies, on the con-"trary, the first purpose of the surveyor, instead of "being directed to the measurement of existing lines or "boundaries, consists in actually setting out on the "ground the limits of stated quantities of land or "'sections,' previously to their being conveyed to the "purchasers." This definition of the objects of a colonial survey supposes that the land is divided into sec-

tions, marked out upon the map and upon the ground, before being selected by purchasers; and such has been the general practice. According to this practice. it is the Government or Company which determines the size and form of sections, and their positions in relation to natural features and to each other; and the settler has no liberty of choice with respect to all those points. The liberty of choice is further. and far more seriously circumscribed, by this-that in consideration of the immense cost of at once dividing all the waste land of a colony into sections, marked upon the ground and the map; of the impossibility of long preserving marks upon the ground, and the necessity, therefore, of repeated surveys and markings in order to preserve the sectional division of the country for use, the plan of sectional surveying cannot be extended over so great a space of country as to afford perfect liberty of choice with respect to situation. Supposing the mode of sale to be, as it has been generally, the sale of marked sections in very limited quantities, immense reserves being left unmarked and unsaleable, then the plan of sectional surveying, which Mr. Williams, following Captain Dawson, goes on to recommend, is obviously the best, and, indeed, the only reasonable plan. Surveying, however, it really ought not to be called: it is not surveying, but dividing and marking into sections. In the cases where it is applicable, it accomplishes the object in view: but the object is as limited and rude as the process. may now state the objects which I conceive ought to be had in view in making a colonial survey; and I feel assured that if these had been stated to Captain Dawson and Mr. Williams, in the form of a problem

to be solved by their answer as to the best mode of surveying, the idea of sectional marking, as a substitute for scientific surveying, would never have occurred to them.

Speaking generally, and supposing the mode of sale to be that which would give to purchasers the most complete liberty of selection over the whole country or settlement, the object of the survey is to furnish for various purposes, and for prompt and easy use by both seller and buyer, the same knowledge of the waste as the inhabitants of a settled country possess without the aid of surveying. knowledge is required for four distinct purposes; first, that of facilitating intelligent selection by the buyer; secondly, that of designating selections both by the buyer in applying for the land, and by the seller in giving possession, to the end that every one should really obtain what he intended really to apply for; thirdly, that of recording selections, to the end that what land was appropriated, and what still open to appropriation, should at all times be accurately known both to the Company and to intending buyers of the waste; and, fourthly, that of record as to title. to the end that the South Province of New Zealand may be one exception from the rule of colonial suffering and loss in the form of uncertainty and litigation about the boundaries of property not accurately surveyed before appropriation.

The objects of the survey being thus defined, it becomes easier to perceive what the survey should be: it should be a description or picture of the country, having the effect of exhibiting in miniature as far as possible all the natural distinctive marks of

the country. The most perfect means of doing this would be a Model Plan of the country, so complete and upon such a scale as to exhibit at one view, in a room, upon a table, all that could be seen bit by bit by means of perambulating and examining the country for months or years. Such models have been made of very interesting spots, but at a cost of time and money which, of course, puts it out of the question that this art should be resorted to for the purpose of depicting waste land in new colonies. But a reference to this art indicates what the map and description resulting from the survey of waste land should be: it should be as complete a representation of the country in all its natural features as can be given by means of measurement, projection upon paper, and written description: the map resulting from the survey should be the same as the Ordnance Maps of this country would be, if divested of the marks of artificial features which they contain.

From this general statement, I will proceed to particulars. The map resulting from the survey should set forth:—

- 1. The coast line.
- 2. Harbours.
- 3. Rivers and streams.
- 4. Lakes and lagoons.
- 5. Remarkable hills or mountains.
- 6. Plains.
- 7. Waterfalls.
- 8. Forest land.
- 9. Naturally clear land.
- 10. Site of the capital.
- 11. Main roads.

- 12. Soundings upon the coast, in harbours and arms of the sea.
- 13. The fall in rivers.
- 14. The height of mountains.
- 15. The height of lakes and lagoons above the sea.
- 16. Minerals.

The only means of obtaining such a picture would be by a trigonometrical survey. The most minute accuracy is absolutely necessary to determine the actual position of all the natural features of a waste country, upon some of which, from their affording economical advantages, such as rivers, or main roads (which last, on the perfect map prior to the selection of land, should be considered as natural features, though laid out by art), all the first locations would naturally be made.

The trigonometrical survey demanding perfect accuracy, no one could undertake it who did not thoroughly understand his profession: the requisite instruments must be of the nicest construction; and the greatest nicety in the use of them, from the first operation of measuring the base upon the ground to the calculation of the space inclosed by the triangles, is necessary: in short, the acutest intellects having been employed for years in devising the means and the mode of insuring the most delicate accuracy in the execution of a trigonometrical survey, it follows that none but a person practised at such work could hope to make an efficient map of a waste country.

#### EXECUTION OF THE SURVEY.

- I. Establishment of the Land Department.
- II. Exploring.
- III. Trigonometrical Survey.
- IV. Traverse Surveying.
  - V. Completion of the Map.
- I. The establishment for the Land Department should consist of a chief officer in charge of the department, who should have attached to him a special officer conversant with all the details, and practised in the operation of a trigonometrical survey, to whom that branch of the Department should be confided. officer would require an assistant in the office, of liberal education, and possessing the qualifications of a draughtsman. His two assistants in the field should, if possible, be men of the corps of Sappers and Miners, who are acquainted generally with the field operations of a trigonometrical survey, as practised on the Ordnance Survey: the efficiency of the men of that corps having been satisfactorily proved in their employment by Captain Frome, the Surveyor-General of South Australia.

The chief officer would require a draughtsman in the office, and a clerk. All other parts of the surveying would be performed by contract, as will be explained hereafter.

II. Exploring would of course be the first step in commencing the survey. The careful management of this branch of the general survey will greatly facilitate all future operations. The officer in charge of the trigonometrical branch of the survey should form part of the first exploring party, in order to find a good spot for the measurement of the base line, and the necessary elevations for fixing stations with a view to triangulating the country. His duties would commence immediately on obtaining the necessary information for that purpose: whilst the chief officer with his party should perambulate the whole country, noting down everything likely to forward his future operations, so as to be ready, on the preliminary triangles being decided upon, to superintend the filling up of the country by traverse surveying.

III. It would be foreign to the object of this Report to enter into all the details of a trigonometrical survey. The efficient mode of carrying out a survey of this nature will entirely depend upon the intelligence and practised knowledge of the officer employed. He would be made acquainted with the views of the Company in desiring a complete map in as short a time as possible, and, I conceive, he would be the best judge as to instruments and other means of carrying out his object. I would, therefore, leave that branch of the Land Department entirely to his judgment, taking care, however, by previous inquiry, that the confidence of the Company was not misplaced. The completion of the Ordnance Survey in Ireland has no doubt rendered the services of such officers available; and who, from such recent practice, are best able to undertake the survey of a waste country, being acquainted with the modern improvements in surveying as carried on so admirably under General Colby.

IV. All experience teaches that the most effective method of getting a general survey accomplished (subject to the check of an accurate trigonometrical survey), is by means of contracts with surveyors. Men of character for upright conduct, and on whose work for accuracy and correct drawing, dependence could be placed, should be selected for this service. The chief officer, being alone responsible for obtaining an accurate survey, should take every means in his power to obtain good surveyors. He would see the necessity of causing his own responsibility to devolve upon the contract surveyors employed by him; and to enable him to have them under perfect control, they should be bound under a clear yet comprehensive contract.

An accurate and complete general survey before selection of land, being so different to the system heretofore pursued in new countries, no estimate can be formed as to the price that should be paid for traverse surveying; and which, again, must depend very much upon the nature of the country. On this point, general knowledge, gained in exploring, will soon enable the chief officer to form a tolerably clear opinion: but as it is essential to have a most complete survey in every respect, the remuneration to contractors must be such as to induce men of character and ability to undertake the work.

In order, also, to simplify the business of supervision of the work of the contract surveyors, absolute uniformity in the form of contract should exist. Nothing is gained by permitting the work of one surveyor to differ from that of another; and there is no reason for such differences when the general

features of the various parts of the country, and the nature of the required survey, are alike. Absolute uniformity in the means of executing the traverse surveying (such as instruments, paper of a particular sort and size, and the scale to which the work is laid down) is also essential in saving time to the officer who is to ascertain the correctness of the contract surveyor's work. As there could be no tribunal to determine between the Company and contract surveyors, whether their work had been duly performed, this question must be left to the sole decision of the Company's surveyor-general. A provision to that effect should be inserted in every contract. indispensable check upon contract surveyors has been adopted in Van Dieman's Land; and, judging from what has happened there, I am clearly of opinion that when the officers of a colonial Land Department are men of high character for honour and acquaintance with their business, it has in no measure the effect of either deterring competent surveyors from entering into contracts, or of enhancing contract prices. it has the very good effect of deterring incompetent surveyors from offering themselves as contractors. Every contract should, of course, set forth in unmistakeable terms the fullest particulars of the work to be performed.

# INFORMATION ON THE DETAILS OF FIELD-WORK IN A WASTE COUNTRY.

Besides the actual survey of the coast-line, of harbours, and of arms of the sea, stations might be fixed to be made use of in the marine survey. Sand banks, shoals, or rocks, rise and fall of the tide in particular places, should all be noticed in the field-book. In rivers and arms of the sea, the spot should be noted where the salt water first mixes with the fresh, as a guide in the choice of locations, which, nearer the sea than that spot, must depend on some other source for fresh water.

Rivers, next to the coast line of harbours, form the most important features of a waste country, from the great advantage afforded by water frontage in the selection of land. In the survey of rivers, any natural obstacle to their free navigation should be observed: the nature of the obstacle and the most eligible means of removing it or avoiding it, should be ascertained and specially noted.

It has been remarked in new countries, that, after some years' occupation of land by cattle and sheep, the grass gets eaten down, and by burning and traffic of stock over the land, the main obstacles to the readily carrying off the surface water into its natural channels—the rivers—are removed. This gradual process causes the swamp of rushes and long grass, fringing the banks of rivers, lakes, and lagoons, to become firm, and, ultimately, by the introduction of artificial grasses, the most valuable land. therefore, very necessary, in making the survey of a waste country, to accurately define what is really river, and what is really swamp, showing in the field book where the sound land becomes affected by the overflow of water in the winter season. to this in surveying and in delineation upon the map, may ultimately lead to disputes: for instance, a location of 100 acres being selected on a river, lake, or

lagoon, having swamps upon its banks, the settler would object to paying for land occasionally over-flowed, and, though abutting on the river, lake, or lagoon, difficult, from its unsoundness, for the settler or his cattle to approach. This swamp will, however, become, by the effects of mere occupation, very valuable land, though in the first outset of settling it is a great annoyance, and subsequently would lead to the supposition that more land was measured into the location than the settler was entitled to. This may be obviated by attention in the general survey, and by noting what is swamp and what is not.

Wherever it can be ascertained, a note should be made of the soil in rivers, whether gravel, mud, or rock, or any other particular of the sort likely to add to the sum of desirable information.

Besides accurately laying down the position of the rivers, special observation should be made of the nature of their banks, whether precipitous or sloping; such peculiarities being shown by the draughtsman in the complete map. A very considerable addition to the desirable information respecting rivers will be the amount of their fall. Where they are of sufficient magnitude and constancy of supply to be safely calculated upon for mills or irrigation, it will be quite worth while to use the spirit level, and to make an accurate section of the river. If possible, some calculation should be made as to the quantity of water flowing at different periods of the year. In many instances, where land is comparatively worthless in quality, the possession of water power the capability of which is known, makes up the deficiency. The fall in feet might be figured in the general map whenever any considerable change in the level takes place. The same remarks apply in a measure to streams or tributaries of rivers. The fall of water, as the mountains are approached, becomes more apparent, though the land is less valuable and the streams are of smaller dimensions. The accurate survey of tributaries of rivers is very essential, as they often form boundaries of locations; in which case, they would be known as "rivers" by the conventional sign before alluded to.

Besides the correct drawing of the boundaries of lakes, their depth and probable dimensions of volume of water in summer should be ascertained. Any particular likely to bear upon an increase of water power at a lower level, by means of using the lakes as reservoirs, should be carefully attended to; and the same distinctness of outline, as recommended to be observed in rivers, distinguishing water from the edge of the lake occasionally overflowed, should be remarked.

Lagoons differ from lakes in being generally formed by surface water gathering in low grounds during the winter, from which there is no outlet; lakes being commonly fed by springs or streams, thus forming reservoirs for the supply of rivers. The correct drawing of lagoons, if occasionally even quite dry, is necessary, as they are, at all times, clear of timber. Every information with respect to the probability of their being drained, and at what cost, and also with regard to the relative qualities of the land when drained is desirable, as being likely to afford facility of selection to intending colonists.

Intersected as New Zealand is by rivers, streams, or

tributaries to rivers, the survey of those features will include that of most of the mountains. Care should. however, be taken in making the survey of streams in their course from the mountains, to observe the undulations of the surface of the ground in the surveyor's field book at the time, so as to be able to show on the map where the mountains begin to rise from the plains; and the heights of particular points might be occasionally ascertained with a mountain barometer, or by the spirit level from some point in a river that had been already ascertained. Without going to the trouble and expense of contour lines in a new country, every serious undulation of the surface should be noticed by the surveyors in their field books, as from such data the hill-drawing will be perfected on the map in the office. With relation to roads, this information will be most valuable. Any peculiar ridges must be surveyed with the chain and connected with the general survey, as in the case of any other general features.

As land clear of timber will give the intending colonist the earliest facility of using a plough, one of the most important objects of the general survey will be to distinguish, in the plan, heavily timbered from clear or plain land. In laying out roads such information is absolutely indispensable, in order to form an opinion as to their direction in relation to probable locations, and to calculate the cost of road construction. In the same manner as pointed out with reference to mountains, a survey of rivers and streams may include in many places plain land, in some instances, interspersed or partially covered with timber. In all cases this timber should be shown upon the

map, so that the intending purchaser may not be deceived in the choice of his land.

In representing on the map the difference between clear and heavily timbered land, care should be taken to distinguish the useful quality and nature of the timber. The choice of a colonist may be influenced by the fact of valuable timber being upon the land, out of which he is to make his selection: another would not prize it from the difference of his views, or the nature of his previous occupation. The profitable erection of saw-mills may be advanced by accurate information on this head, exhibiting at a glance, by the use of conventional signs, the nature, quality, and quantity of timber: indeed, abounding and various as timber is in most new countries, a map would be very incomplete that did not afford the most ample information respecting a main and useful natural product.

The nature of the soil, a knowledge of which is so important for intending colonists, could be expressed on the map by conventional signs used to denote the grassy plain, or land covered with timber, adding others of easy invention to indicate its qualities of sterility and fertility.

The manner of carrying on the marine surveying must be left to the judgment of the officer in charge of the Land Department. The coast, in many places, may be of such a nature as to require no marine survey apart from the accurate delineation of the cliffs or other bold features which will form part of the land survey. In other spots, where the approach to harbours is rendered difficult by shoals or other impediments of that nature, and where a complete survey is necessary, perhaps persons might be employed more

accustomed to marine surveying than the contract surveyors of the land survey, who would be willing to undertake such work, subject to the checks that the Land Department would readily cause to bear upon it. The reason why I would wish to separate the two operations is, that marine surveying requires boats, and a sort of establishment for that purpose, which would be expensive and perhaps only required at spots on the coast widely separated from each other. Besides, in a new country, the set of tides under the influence of different winds, and a variety of details, could only be ascertained by nautical men possessing some previous experience. In some cases, the chief officer might see fit to combine the knowledge of scientific nautical surveying possessed by one of his own surveyors, with the local experience of a seaman, and contract with the two for the survey of a harbour or part of the coast that it was requisite to have surveyed. But it is the less necessary for me to dwell on this subject, because, with respect to the marine surveying of the coasts of New Zealand, the Company is already receiving the most valuable assistance in consequence of the determination of the Admiralty to employ Captain Stokes in this important work. The experience, skill, and energy of that officer are such as, combined with the efficient means at his disposal, to hold out the prospect of an early and perfect delineation of every marine feature of the coasts that it is desirable to possess. These, when brought into the form of a chart by the Admiralty survey, would be readily combined with the Company's land survey of the coasts; and it should not be overlooked, as a matter of great benefit to the Company,

tending to facilitate and promote the accuracy of their land surveys, that the marine survey of Captain Stokes will comprise the whole land line of the coasts, and will thus, by fixing the position of the outline of the Islands, furnish the Company with a very important portion of their work, done ready for use, as a guide and a check in their survey of the interior.

Conventional signs should be explained in the margin of the plan, great care being taken not to crowd the plan with writing: the object of the map being to promote facility of selection in choosing land for different purposes, all marks or observations that are not clear and distinct, should be avoided.

Conventional signs might also be used to denote the presence of minerals; but more especial mention, and more in detail, would be made of them in a report that the chief officer of the Land Department would make upon the whole survey on the completion of the general map; and which might be usefully condensed for the purpose of affording information to intending purchasers of land.

In adding geological information to the stock of knowledge of a waste country, a distinct skeleton plan, as it appears to me, should be made, on which merely the coast-line, the rivers, lakes, lagoons, and mountains should be portrayed, as being more convenient than the general map. The combining the natural features on the surface with the strata of the earth beneath it, would only tend to confuse the mind of the settler in the choice of his land.

Each surveyor might keep an index of the weather at his tent or wherever he has his abode. The temperature might be noted each day at a particular hour, or any other remark calculated to add to the sum of knowledge of climate, and transmitted, perhaps, with the monthly survey, in an easy columnar form, to the officer in charge of the Land Department, who would have these returns classified in his office. This information should not appear upon the map; but, as it is useful and not difficult to obtain, it should be cared for, and form part of the report upon the general survey.

The chief officer of the Land Department having been continually in the field during the progress of the survey, superintending the work of the contractors, will have made up his mind, even before the survey is placed upon paper, generally as to the lines of main road. He would be continually on the watch for eligible spots for crossing rivers by bridges, and where nature points out the foci of great traffic. In a new country, where it is obvious that the most fertile land is comparatively useless without means of communication, great judgment will be necessary in the choice of lines of road: so many points must be considered in order to make a profitable choice; level, quality of the soil, length of the line to avoid engineering difficulties, and materials for subsequent construction, being the most important, after fixing generally on the most available line for opening out a waste country. The lines of road being determined on, it will be necessary to mark them on the ground, to have them accurately surveyed, and marked upon the map, exactly as if they were natural features. The roads should all be one chain or sixty-six feet wide, but it would only be necessary to mark on the ground the centre of the road, leaving the thirty-three feet on each side to be marked in the construction.

A few remarks may now be necessary as to the arrangements I should be inclined to make with regard to the management of the office, and of the survey generally.

First, as I have remarked with reference to contracts, I would recommend absolute uniformity in the instruments of all kinds used upon the survey by the different surveyors and draughtsmen. The theodolites, compasses, or whatever other instruments are employed for taking angles, in short every instrument used upon the survey, should be issued from the office, where every means of adjusting and regulating them by a known standard is at hand. The same form of field-book, such as the one used on the Ordnance survey, should be used upon the whole survey; so that the persons in the office could plot and check all work alike, without reference to anything but the field notes themselves.

Besides the original protraction of their work, which the surveyors should send in to the office once a fortnight, they would, as a matter of course, keep by them a continued plan of their work, for the purposes of reference and addition. This plan would be continually inspected by the chief officer of the Land Department, whose place should be continually in the field superintending the details of field work. His energy, and attention to the survey, would have great influence over those about him, and his being so much in the field would obviate the constant necessity of writing and reference to head-quarters, which are always liable to misapprehension and delay.

V. The original protractions of the field work

being received at the office, they would be there checked and their accuracy clearly proved. They would then be joined together, and reduced to a convenient scale to form the general map, which must be left, as well as a variety of the details of the office, to the intelligence and experience of the officer in charge of the Land Department: but some general remarks, the result of colonial experience, may be useful.

I consider that if spots fit for immediate location occurred upon the coast, for instance, intersected by large tracts of unavailable land, it would not be requisite to complete the survey of such unavailable tracts before the maps of the available spots were completed These available spots should be surin the office. veyed and declared open to selection without reference to the adjacent unavailable land. And, also, with reference to the general map, the joining of such maps would not be necessary in order to make them serviceable to intending purchasers: for whilst selection in the available land was taking place, the survey of intervening tracts would be going on, and the general map, by the joining of the different surveys, would be completed, perhaps, as soon as it was wanted.

On the completion of the general map, it should be multiplied, in convenient sized sheets for distribution amongst intending purchasers, by the aid of lithography. For this purpose, a press and complete lithographic apparatus would be necessary, in charge of a person conversant with the business of a lithographic printer. For descriptions and reports of land, as well as notices emanating from the office of the Land Department (likely to be very numerous in the disposal of a waste country), after the completion

of the general map, would be multiplied much more cheaply and more correctly by this process than by written copies.

### III.

# MODE OF SELECTION, GIVING POSSESSION, AND COMPLETING THE TITLE.

It must be supposed that the survey is complete, and that its results, consisting of the map and written description of the country, are in the hands of the public, together with the regulations concerning the quantity, position, and form of sections. Purchasers of land and pasturage orders would now examine the waste with the means of selecting judiciously, and with a precise knowledge of the restrictions to which the rights of choice which they had obtained were subject. A single case will serve for general illustration. it be supposed that a purchaser, after finding out the spot that he would like to obtain, returns to the landoffice and describes the desired selection, by pointing out on the map where he wished its boundaries to be If his scheme of boundaries were agreeable marked. to the regulations, an officer of the Department, having sufficient knowledge of the surveyor's art for that purpose, would at once delineate the boundaries on the map. In doing this, if the map were the representation of a strictly accurate survey, there would be no sort of difficulty and no risk of error. From that moment, the land comprised in the section would be the property of the purchaser; and, by being marked on the map, would be known as such

by all other intending purchasers and by the Company's officers: it would only remain to put the purchaser in possession. In order to do this, it would be necessary for an officer of the Land Department, whether engaged by salary or contract for this kind of work, to proceed to the spot, and there, in the presence of the purchaser or his agent, to mark upon the ground the boundaries corresponding with the marks upon the map. This done, it would be the business of the proprietor alone to preserve the land marks, which, as established by the Company, should be no more than sufficient to give the purchaser a perfect knowledge of the boundaries of the section at the time of taking possession. That time would be when the marks on the ground were made by the Company's officer in the presence of the purchaser or his agent. At the same time, there should be delivered to the purchaser a diagram of the section, copied from the map, and appended to the deed of conveyance, which should also be then delivered to the purchaser. The whole operation, as respects this section, would now be complete; and a similar operation must of course be performed with respect to every other section.

There appears to be no necessity for marking on the ground the boundaries of pasturage selections. The property being temporary and uncertain, the occupier would not think of fencing in his section; and the perfectly strict observance of the boundary in use would be of little or no moment. Permanent land marks would not be required for designating a property not intended to be permanent. On the other hand, in consequence of the large area of pas-

turage sections, the trouble and expense of marking their boundaries on the ground would be very great -so great, if that plan were adopted, as to require a much higher rent for pasturage in order to cover the expense of carrying the pasturage regulations into effect. Upon the whole, therefore, I am of opinion, that the boundaries of pasturage sections ought to be marked upon the map only. A diagram, however, of the pasturage section, copied from the map, should be appended to the lease, delivered to the occupier on payment of his first year's rent in advance. in the exercise of the occupier's pre-emptive right of purchase, any dispute should arise as to the boundaries within which the right existed, the question could be readily settled by survey and measurement of the ground.

## COST OF THE SURVEY, SELECTION, AND GIVING POSSESSION.

With respect to the cost of surveying in the manner proposed, one can only wish that it were possible to arrive at positive conclusions. This is not possible, because the mode of survey, selection, and giving possession, which I have recommended, has never been adopted in practice, so that the guide of positive experience is wanting. And again, although the operations of the Waste Land Department in various colonies have so far resembled the foregoing plan, as to appear calculated to furnish materials of judgment about cost by means of analogy and comparison, yet the circumstances under which those operations have been carried on have been so various, and in all cases

so different, with respect to the causes of outlay, from those which would exist in New Zealand if a comprehensive plan were there systematically carried out, that probable and approximate conclusions are all that it would be prudent to draw from the past. Some care, indeed, is required to avoid being misled by apparent resemblances between cases essentially different. It is perhaps well that I should mention some of the more important differences between what would now take place in New Zealand in carrying out the proposed system, and what has already taken place there and in other colonies.

The surveying of waste land in Canada, where nearly the whole waste is covered by a dense forest, is, as respects difficulties, a widely different process from that of surveying in New Zealand where the greater part of the waste-in some extensive districts (such as the intended Canterbury Settlement) almost the whole of it—consists of plains free from timber and bearing only fern or grass. In Canada, the process which has been called surveying, was really little more than the measuring of sections on the ground with the compass and chain, and on the map with the scale. The nature of the ground and the nature of the survey are both very different from the ground and the proposed survey in New Zealand: and yet these two circumstances instead of operating in the same direction as respects cost, would be apt to counteract each other—the universality and density of the forest being conducive to dearness, and the rudeness of the so-called survey conducive to cheapness. Taking the forest and the unreality of survey together, what happens in Canada really affords no guide in

the making of an estimate for real surveys in New Zealand: the two cases are so different in their most important features as to be unfit for comparison. several respects, what has already taken place in New Zealand under the Company's direction, has little relation to what would happen in future according to the proposed system. There has been in New Zealand no surveying properly so-called. Apparently, the cheapest process has been adopted; but it was not so for two reasons: because, in the first place, the Company did not confine itself to marking sections on the ground and representing them on the map, but it undertook the task of picking out from the waste the most fertile and best situated land of a district: a task difficult and tedious under any circumstances, but especially so where there was no real survey of the country to serve as a guide to judgment: and secondly, because although, with respect to the picked-out land, the seemingly cheap process of only marking sections was adopted, yet, inasmuch as the greater part of those sectional marks are sure to be obliterated from the ground, a second expense must be incurred for reestablishing them. I understand that at Otago in particular, where a good deal more land than had been sold was sectionally marked, and where, accordingly, there were no settlers to preserve the greater part of the land marks, a re-survey, or rather a remarking, of much of the ground is already called for. If this ground were now re-marked in order to afford some freedom of choice to purchasers, a third remarking as to the portions not now sold would probably be required two or three years hence. I believe it will be found, not only in New Zealand, but in the

parts of Australia where the plan of sectional marking has been adopted instead of real surveying, that the process of ground-marking becomes dear in the long run in consequence of the obliteration of marks on land not appropriated. Then as respects most of the Company's Settlements, the surveying establishment has of necessity, in consequence of the desert state of the country, been dispatched from England, and has further been made very expensive by the high price of provisions in the earliest stages of New-Zealand colonization, and by the necessity of providing residences and other conveniences for the persons employed on the survey of land far distant from any settlement: and these are circumstances, of a barbarous nature they may be termed, and conducive to heavy cost, which the colonization of the Islands has guarded against for the future. At most of the settlements again, the plan of contracting for the survey was not attempted; and when it was (at Otago), it had not a fair trial as respects cost, because the colony has not been in a state to afford much competition for employment among competent surveyors. But above all, there has been wanting the continuous pursuit of a uniform system. Different modes of survey have been adopted in the various settlements, and the work has been carried on, sometimes with long interruptions by political causes, productive of derangement of plan and loss of poweralways in a hurry and with a prospect of early cessation—as a single piece of work which was to be got through and done with, and not as part of a systematic and continuous operation.

But I think it may be said with confidence that the

proposed surveys in New Zealand would take place under the most favourable circumstances as respects cost. These circumstances are:—

- 1. The open nature of the country: a particular in which New Zealand is now found to resemble the Australian colonies.
- 2. The fineness of the climate. The dependence of the progress of surveying, and especially of surveying uninhabited tracts, upon the number of days in a year of such weather as does not stop work, is a really important consideration.
- 3. The plan of real and complete survey, under which the one cost is the whole cost; and the accuracy of the survey, which prevents doubts and disputes about the positions and boundaries of selections—a fruitful source of expense when the survey is imperfect.
- 4. The plan of marking sections only after selection by purchasers, so that this important portion of the expense would never be incurred uselessly. It may be remarked, too, that this portion of the expense would never be incurred until the purchase-money of the marked land had been received by the Company.
- 5. The plan of getting everything done by contract that is susceptible of being paid for in that way. Thus, as respects the greater part of the work, the Company would have the benefit of competition amongst contractors, whilst the salaries paid to superior officers of the Land Department would be fixed and known sums independent of contingencies. Judging by the proceedings of the Public Lands Department in the United States, and by what has

taken place in parts of the Australian colonies, I rely greatly on the contract system as a means of reducing the cost to the minimum. The low price of provisions in New Zealand, which is now established beyond risk of change, would of course tend to reduce contract prices to the minimum.

6. The large scale and the comprehensive and systematic nature of the work, which would have the effect of making the business of surveying by contract a regular trade in New Zealand, would enable the contractors to adopt the most economical arrangements, and would afford to the Company all the advantages in point of order, method, and a well established responsibility for the superintending direction of such a work. There would be four or five surveys going on at once in as many Settlements; and as all would be under one superintending guidance, the best in point of efficiency and cheapness would be a kind of standard to which the others would soon be brought to conform.

Although I have, for the reasons stated, purposely avoided attempting to estimate the cost of the proposed survey by reference to what has heretofore taken place in New Zealand and in other colonies, yet the Company may be aided in forming an approximate estimate of probable cost, by referring to an actual survey, which was of the same kind as that proposed, and also the most elaborate and complete survey of the kind that has ever been made. I allude to the Ordnance Survey of Ireland. The object of this survey was to furnish a true picture of the country, as perfect as such a picture can be made by the art of surveying. The elaborate character of the work is

shown by the maps resulting from it. These exhibit an exact representation of the boundary lines of

- 1. Counties.
- 2. Baronies.
- 3. Parishes.
- 4. Townlands:

### The detailed features of-

- 1. Cities.
- 2. Market Towns.
- 3. Villages;

## The localities of-

- 1. Parish churches.
- 2. Glebes.
- 3. Ruins.
- 4. Antiquities.
- 5. Forts.
- 6. Parks.
- 7. Demesnes.
- 8. Mansions.
- 9. Farms.
- 10. Rivers.
- 11. Brooks.
- 12. Bogs.
- 13. Marshes.
- 14. Harbours.
- 15. Bays.
- 16. Creeks.
- 17. Canals.
- 18. Docks.
- 19. Weirs.
- 20. Locks.
- 21. Bridges.
- 22. Wells.

- 23. Mines.
- 24. Quarries.
- 25. Collieries.
- 26. Lime Kilns.
- 27. Forges.
- 28. Gravel Pits.
- 29. Brick Fields.
- 30. Bleach Grounds.
- 31. Tanneries.
- 32. Factories.

A mere glance at this list of the natural and artificial features pictured by the map, shows that an amount of work must have been performed in the survey, vastly greater than what would be required for picturing the merely natural features of a waste country together with the lines of main road, and marking out sections of land as properties; but the difference can only be duly appreciated by careful reflection on the numerous and complicated details of the Irish survey. Besides those already enumerated, it should be borne in mind that the Irish survey is distinguished by the introduction of the plan of contour lines, the object of which is to show on the map (by a very ingenious and elaborate process) the precise elevation of all rising grounds above the valleys. The maps of the Irish survey are on a scale of six inches to the mile, so that if all the sheets were placed edge to edge in their proper places, they would form a monster map of Ireland 140 feet high by 100 feet in Besides the principal maps, there are index maps of the counties on a smaller scale, to facilitate reference to the larger maps; and these index maps are as beautiful county maps as ever were executed.

The six-inch townland sheets that contain great towns. such as Dublin and Cork, are admirable specimens of elaborate engraving. All these maps were engraved upon copper plates on which they were originally drawn with a view to perfect accuracy, because paper is subject to contraction and expansion by variations in the state of the atmosphere. Yet the entire cost of the Irish survey was at the rate of about tenpence per acre. When, as above suggested, a comparison is made between the amounts of work in the Irish survey and that of surveying a waste country as open as New Zealand, and of marking out mere selections of property; when a further comparison is made of the engraved Irish maps with the lithographic maps which would suffice for the purposes of the Company; and when, moreover, allowance is made for all the favourable circumstances as respects waste-country surveying, under which surveys in New Zealand would now be undertaken, it can hardly be an erroneous opinion, that the New-Zealand survey might be performed at a cost very considerably less than at the rate of ten-pence per acre. My own impression is, that the expense ought not at any time to exceed sixpence per acre; and I am inclined to believe that after the whole system was got into full and smooth operation, the cost might be reduced to threepence per acre. If these estimates are not far from the truth, it appears that, as a question of profit and loss, the Company is as much interested as the colony in the speedy completion of the work: for in whatever part of New Zealand the work was completed, the country would be really opened for settlement and purchase; that is, in a condition to bring money into the Company's treasury.

A single example of benefit to the Company will suffice for explanation. I am persuaded from my knowledge of the state of the Australian colonies and of the desire of people in this country to engage in pastoral life in New Zealand, that if the plains of the Middle Island alone, which contains probably at least ten million acres of very good pasturage, were laid open to free selection by means of the survey, and on the terms before suggested, they would ere long be pastorally occupied by persons bringing herds and flocks from the neighbouring colonies: and the pastoral occupation of this land alone, without reckoning sales of freehold which the pastoral occupation would inevitably occasion, would yield to the Company an annual revenue of 100,000l. If my view of the cost of surveying in New Zealand is not greatly erroneous, it would be difficult to conceive a greater waste, which is a loss of property, than that which the Company now incurs, because its territory is not yet really opened for colonization by means of adequate survey. cannot be a doubt that if the colonists had the management of their own affairs, including the management of the waste lands, their first object, as one of economy and profit, would be to lay out the funds required for such a survey of the waste as, by opening the country to settlement, would soon defray its cost over and over again.

## ADAPTATION OF THE PROPOSED SYSTEM TO PRESENT ARRANGEMENTS.

Having carefully examined the different sets of Regulations now in force in the Company's settlements, the outstanding engagements into which the Company has entered for the disposal of land, and the state of each settlement as regards the completed survey, or rather marking into sections, of land not vet sold. I am of opinion that the proposed mode of sale, selection, and survey, might be readily adopted for the future, and fitted on to what has been done already. In one or two cases, where there is unsold land set apart for disposal under existing Regulations, I would suggest the expediency of obtaining the assent of the settlers generally to the placing of that land for disposal under the new regulations; for it is not in colonies only (though it is especially so in colonies, where authority is always regarded with a jealousy proportioned to its irresponsibility), that men are apt to object to a measure, however obviously advantageous to them, if they have no voice in determining on the change. Regard being had to this principle of human nature in the endeavour by the Company to change the disposition of unsold land now subject to a particular mode of disposal, the rest of the Company's business in fitting the new plan on to the old at each settlement, would be matter of detail into which I could not enter without extending this Report beyond reasonable bounds. examination of the past with a view to the future, these details have not been overlooked; and I am now satisfied that there is nothing in the Company's engagements and other proceedings to prevent the immediate application of the proposed system to all but a very small portion of the land still unsold and at the disposal of the Company. It may be proper to remark here, however, that if the Otago and Canterbury Associations in this country were induced to apply to the large tracts which the Company has sold, or agreed to sell, to them, the whole of the proposed system of sale, survey, and selection, the work of fitting the future on to the past throughout the South Province, would be much facilitated and expedited.

#### TEMPORARY MAKE-SHIFT PROCESS.

Before concluding, it remains for me to describe briefly the make-shift and inferior process of surveying by means of which some effect might be given to the proposed Regulations for sale and selection before the perfect survey was completed. Supposing the Regulations for sale and selection to be adopted and announced by the Company, then during the time between such announcement and the completion of the perfect survey in any settlement, there would be no land open to purchasers unless some temporary means were adopted of enabling purchasers to select and obtain possession of land. This is really the case now in more than one of the Company's settlements, where all the sectionally-marked land has been appropriated, and no kind of survey has been extended beyond the limits of appropriated land. The effect is really to stop settlement and colonization as these depend on the acquisition of freehold land; but another effect takes place which is still more fatal to the prosperity of the colony—namely, the stoppage of the extension of pastoral husbandry except by means of lawless occupation, or "squatting." It is in order to afford facilities for the extension of pastoral husbandry, that, with a view to the immediate prosperity

of New Zealand, and the rapid progress of freehold settlement hereafter, some temporary means of disposing of land and pasturage ought to be employed during the progress of that complete survey which would lay all the land of each Settlement open to purchasers and pastoral occupiers. The nature of such a temporary process is indicated by the object in view. The object is to let people select and get possession of land or pasturage before any survey was made, or notwithstanding the total absence of survey. There is one way in which, as I apprehend, this might be done. Let it be supposed that purchasers of orders for land or pasturage were authorized to proceed into the waste, and choose sections as they pleased, subject to the Regulations with regard to form and frontage. They should be precluded from making selections except of land bordering on a manifest and indelible natural feature, such as the coast line or the bank of a river; or, in other words, it should be a condition of the right to select, that the boundary of the selection on one side should consist of a coast line or river bank. The selection being thus made, an accurate survey of the natural boundary and of the other boundaries proceeding therefrom, would be a complete survey of that particular section, and one which, by means of the indelible natural boundary, might be so recorded on a map and by description as to be capable of subsequent verification. This record, however, would only be positive—that is, confined to the particular spot, not having relation to other objects. Such sections would be properties, of which the relative position would not be fixed, but which, so to speak, might be found

afterwards by means of the natural boundary, and could be brought into their true relative position on the perfect map as the perfect survey proceeded. If I make myself understood, it will be seen, that in the mode of permitting selection before the general survey, all depends on taking care that one boundary of every section is a natural mark so distinct and indelible, as to be sure of always corresponding with the delineation of it on paper, and, therefore, of being always recognised as the mark by which the relative position of the section would be afterwards determined in the general survey. It is not a new invention of my own that I am proposing: the plan has been carried into effect with regard to a good deal of land in Van Diemen's Land, and successfully as a means of acomplishing its temporary and very limited object. I admit that the process is very rude and imperfect: but the adoption of it would at least establish liberty of choice and facility of appropriation for those hardy and adventurous classes who know how to explore the waste without a map of it to guide them; and, at the worst, this process is greatly preferable to what must take place if neither this process should be adopted nor a general survey made. The value of the natural pasturages of New Zealand has become known to the settlers and in the neighbouring colonies. If these tracts are not laid open for use by lawful means, they will surely be used unlawfully. "Squatting," or using land without a title, has already made some progress in New Zealand. Flocks and herds are being poured into the country by people who, if they cannot obtain pasturage with a title, will take it

without one. No government has the power to prevent squatting, when, in consequence of nothing being done to open the land for lawful occupation, fertile land must either be squatted upon or left desert. Public opinion sustains the squatter, because his proceeding is advantageous to the colony. If not lawfully, then unlawfully let the waste be occupied: such is colonial opinion, and it has ever proved stronger than colonial government. By degrees, naturally, the squatters consider themselves and come to be regarded as proprietors. They band together; opinion in the colony sustains them; and the government, after a vain struggle, is under the necessity of putting them in lawful possession by some means of the property which they have acquired unlawfully but with great benefit to the colony. New Zealand is, by all accounts, on the point of becoming a field for extensive squatting. Extensive squatting in New Zealand would be fatal to the Company as well as to its great public object—the regular colonization of the Islands. It is impossible now to prevent extensive squatting in New Zealand, except by means of immediately opening the naturally fertile wastes to lawful occupation. It is with a view, therefore, not merely to some progress of regular colonization during the work of a complete survey, but also with that of preventing circumstances which would be fatal to every object of the Company, that I have suggested as a temporary substitute for ample surveying, another and very inferior means of opening the country for beneficial use.

This appears to be the proper place for submitting to the Company a consideration, which it is at all

events my duty to bring before them. Between the very rude process just above described, and the perfect trigonometrical and topographical survey which I have before recommended, there are many degrees of completeness or incompleteness, the adoption of which would involve respectively different amounts of trouble, time, and outlay. I firmly believe myself, that in the long run, and with reference to so extensive a territory as that of the Company, the most complete survey—that is, the survey which most completely determined the natural features of the country, and most completely described them-would be found the least troublesome, the easiest to establish, the least expensive, and, above all, the most profitable, as being most conducive to the rapid sale of land at a price in comparison with which the highest conceivable cost of survey is a matter of trifling moment. But I can imagine that others, especially in this country, may think that an inferior process-one that less accurately defined the position of natural features, and far less fully described them-would be good enough for the occasion. Most people in this country would think that a colonial survey ought to be inferior, like a colonial government, or the composition of colonial society by means of the emigration of paupers and convicts. If it were a question of surveying for disposal by sale of a part of the United Kingdom which some miracle had deprived of its proprietors and inhabitants, and which was therefore in a state of waste, the general wish, the universal opinion, would be in favour of the most perfect survey that the skill of the Ordnance Department could accomplish. All the reasons for completeness in the

one case, are good reasons for it in the other. The disposition to think that a colony ought to be content with something inferior, is only a prejudice. I fully admit, however, that it is a prejudice difficult to contend against and hard to overcome. It affects everything which proceeds from this country and affects the colonies: and its force is such that the New Zealand Company even, if they do not share it, may be under the necessity of bowing to it. It is not difficult to provide for this necessity. The Company may provide for it by adopting either only the make-shift process above described, or any one of many degrees of inferior completeness between it and the perfect survey. This is a question of degree. For instance, a plan exhibiting merely the coast-line, rivers, lakes, and ridges of mountains, would be very superior to the make-shift process, and yet very inferior to the perfect survey in completeness and usefulness. therefore, the question of degree should be entertained by the Company at all, it is a question which they alone could determine. It was my business, in pursuance of your letter to me of the 8th of June, to devise and submit to the Company, what I conceive to be the very best mode of proceeding. When I had done this, my task was performed; but I am so well acquainted with the prevalence and force of the prejudice which objects to "the best" when it is proposed for colonies, that I have thought it right to point out to the Company the existence of many degrees of completeness below the best, which would not be absolutely, but only more or less, inefficient.

The scale upon which any plan may be carried into effect is a question not merely of cost, but of

what may be properly termed available capital, and also of available means as respects the number of skilled surveyors whose services could be obtained. However profitable it might be to the Company to invest at once six or seven hundred thousand pounds in completely surveying the 58,000,000 acres comprising the Southern Province, they may not have so much money at their disposal; and if they had, together with a conviction that there was no more profitable mode of investing it than in surveying the whole of their territory at once, they would certainly not find at once a sufficient number of competent hands for carrying so large a work into immediate completion. This again is a question of degree. is not necessary, however desirable it may be, that the whole province should be surveyed at once. It is only necessary that a considerable quantity of land should be surveyed at each Settlement. What is the whole extent of land upon which the Company should begin, is a question not for me to offer an opinion upon, but for them alone to determine. I have recommended a plan which is applicable to the greatest or the smallest extent of land; and I purposely abstain from suggesting the scale upon which it ought to be carried into effect, because that question must at all times be determined practically by the amount of available means at the time, as respects both money and the services of competent surveyors. But I make bold to insist with earnestness, that whatever may be the scale of operations in any case, the mode of proceeding ought to be the best that it is in the power of Government or Company to devise.

#### CONCLUSION.

May I be permitted to observe finally, that the present state of things in New Zealand affords the opportunity of setting on foot the proposed system of survey and disposal of waste land with a prospect of results, in comparison with which the cost of the operation would be really insignificant. Indeed, the Company has now for the first time an opportunity of colonizing systematically on a large scale. Until quite lately, it was not, I believe, in their power to dispose of any land with a secure title, because they had not themselves obtained a secure title to any land. Whilst the native title remained everywhere so far in force as to deprive the Company of a really legal title to any land, their proceedings were necessarily of an irregular, uncertain, and make-shift character. Considering the insecurity of any step taken by them, it is rather matter of surprise that in ten years they should have established four distinct Settlements or Colonies, as prosperous as these are, besides laying the foundation of a fifth, which promises to excel the others in the elements of colonizing power, than matter of reproach that they have not done more. Unavoidably, until now, their measures were in the nature of a scramble, the principle of action being to do anyhow that which would suffice for establishing on some footing the British colonization of the Islands. But now, at last, the obstacle to security, order, and system which beset all their proceedings, has been removed as to a large portion of the territory which Parliament has intended they should colonize. I understand that in the Middle Island, which contains by

estimate 46,126,080 acres, the Native Title is finally extinguished, and the land really placed at the disposal of the Company. Judging from the importance which Governor Grey manifestly attaches to the early extinction of the Native Title everywhere, and from his successful conduct of this operation in the Middle Island, it may be presumed that some early arrival from New Zealand will bring accounts of the extinction of the Native Title in the Settlements of New Plymouth and Wellington. When this shall be done, the Company's territory will amount to about 58,000,000 acres; and it will be a territory really at their disposal, or, in other words, really in a condition to be made the subject of a systematic plan of survey and disposal by sale and letting. Even now, the really available territory of the Company amounts to about 46,000,000 acres. Already, therefore, the opportunity of proceeding systematically, and with a prospect of important results, though it has just occurred for the first time, is sufficient to justify the adoption of system in the Company's proceedings, and on the great scale which, in the disposal of waste land, is an essential condition of any beneficial system. natural wealth of New Zealand, as respects pasturage for herds and flocks, has but recently been ascertained, but is now established beyond question. Every year's experience confirms the impressions of the first settlers as to the remarkable pleasantness and productiveness of the climate. Never, in the history of this country, was there a period equal to the present in the disposition of people of all classes to emigrate and settle in such a country as New Zealand would be, with respect to the improvement of the fortunes of emigrants, if its fertile wastes were really laid open to colonists. Even the present price of wool is a favourable circumstance; since it would encourage capitalists in Australia to convey their redundant flocks to the pasturages of New Zealand, if they were but sure of being able to obtain leases of pasturage with a preemptive right of freehold purchase. In Van Diemen's Land, I can say of my own knowledge, that the continued introduction of convict emigrants in great numbers has disposed some of the most respectable and wealthy settlers to leave the colony: and New Zealand would be to them the nearest and most agreeable place of refuge, if its lands and pasturage were open to free selection in the manner proposed. On the whole, therefore, after months of inquiry and reflection on this subject, I feel justified in saying with confidence, that if the measure here recommended were carried into immediate and complete effect, the colonization of New Zealand would immediately proceed at a rate, and with a degree of advantage to the Colonists and the Company, surpassing what has hitherto occurred in any similar undertaking.

I have the honour to be,
Sir,
Your obedient humble servant,

FELIX WAKEFIELD.

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